The Mining Journal
AND ATMOSPHERIC RAILWAY GAZETTE,

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 587.—Vol. XVI.] LONDON: SATURDAY, NOVEMBER 21, 1846. [Price 6d.

CORNWALL.—TO THE PROPRIETORS, PURSERS, and AGENTS of the several MINES within the BOUNDARIES hereinafter described—the same being situate within the Duchy Manor of Tywarnhayle and Tywarnhayle Tyas, wherein I claim to be the Proprietor of the Surface, and a portion of the Ores and Metallic Minerals.

I do hereby give you Notice,

That you are not to remove or carry off, nor permit or suffer to be removed or carried off, from any of the mines within the boundaries hereinafter mentioned, any of the engine-houses, boiler-houses, account-houses, or any buildings whatsoever, erected for the purpose of mining; nor from any mine or mines that may be considered as abandoned within the said boundaries; nor any refuse stuff, commonly known as balvans, containing metallic ores. The said boundaries are as follows:—The whole of the parishes of St. Agnes and Perranzabuloe, Wheal Park, and many other mines which lie to the South of the Five Burrows, in the parish of Kenwyn; the Kellewerris Consols, Wheal Hallenbeagle, and Wheal Busy Mines, in the parishes of Kea and Kenwyn; Wheal Chance and Wheal Ver, commonly known as Treskerby Consols Mines, and Wheal North Downs, in Redruth and Gwennap; and, also, New North Downs, Wheal Plenty, and many other mines on Sinn's Commons, and wastes, in the parish of Redruth. WILLIAM HOSKINS.

Dated Beacon, St. Agnes, Oct. 5, 1846.

TO LABOURERS.—TENDERS will be RECEIVED by the undersigned for INCLOSING SEVERAL HUNDREDS OF ACRES OF WASTE LANDS, situate in the parishes of St. Agnes and Perranzabuloe, at so much per yard, of 18 feet in length; the fences to be built either with stone or turf.—Specifications and contracts may be seen on application to the undersigned.—Leases also will be granted on Goonvrea Commons, for 21 years, at the rate of 1s. per acre. Preference will be given to the inhabitants of St. Agnes. WILLIAM HOSKINS.

Dated Beacon, St. Agnes, Oct. 29, 1846.

TO MINERS, ENGINEERS, IRONFOUNDERS, &c.—TO BE SOLD, BY AUCTION, by Mr. T. BRANCH, on Friday, Nov. 27, 1846, at Twelve o'clock precisely, at a Warehouse (Wilson's) in Benn's Gardens, Liverpool (without the least reserve, to close an account), TWO NEW CAST-IRON PUMPS, for LIFTING WATER, 12-inches bore by 5-feet stroke, with sundry buckets, clacks, Wheel shafts, cranks, quadrants, pipes, rods, and bolts, for making two lifts in a mine—about 180 feet each lift; the pipes are about 4 feet long and 13 inches bore, of wrought iron, about ⅜ths of an inch thick.—The above will first be offered altogether in one lot; and, if not so sold, they will be then put up in separate lots, and sold to the highest bidder, without the slightest reservation, in conformity with the catalogue.

The whole may be viewed any time previous to the sale, by application to Messrs. A. W. Powles and Co., No. 4, Water-street, and catalogues may be had from them; or at Mr. Branch's offices, in Hanover-street.

ADJOURNED SALE.—UPSET PRICE REDUCED.

EXTENSIVE AND VALUABLE IRON-WORKS, IN CLOSE VICINITY OF THE HARBOUR OF ABERDEEN.

There will be again exposed FOR SALE, BY PUBLIC ROUP, within the Lemon Tree Tavern, Aberdeen, on Saturday, the 19th day of December next, at Six o'clock, P.M., those extensive and valuable PREMISES, at FOOTDEE, ABERDEEN (bounded on the west by the harbour), known as

"THE DEE IRON-WORKS,"

and long employed in the ENGINEERING and MILLWRIGHT BUSINESS, and in IRON-FOUNDING, BOILER-MAKING, IRON SHIPBUILDING, BLACKSMITH WORK, BRASS FOUNDING, &c. &c.

These works are very compact, and much more advantageously situated than many other works of the same description, for iron shipbuilding and engineering business—having a WATER FRONTAGE to the HARBOUR, and in close connection with the other parts of the establishment—and the whole lying so contiguous, that all the branches of the business can be carried on under the same superintendence.

In the BUILDING YARD several iron vessels may be proceeding at one and the same time, of from 200 to 2000 tons burthen; and the tools and machinery in this department are believed to be equal to any in the kingdom; there are other accommodations for carrying on this branch of business in its fullest perfection.

In the ENGINEERING DEPARTMENT the tools and machinery are of the most improved principle, and capable of constructing engines or machinery equal in magnitude to any known at the present day, and are sufficient to employ (constantly) from 100 to 130 men. In connection with this department, the building and fitting of locomotives may be carried on to the greatest extent.

The IRON FOUNDING DEPARTMENT is fitted up in the most complete manner, and capable of turning out both heavy and light castings, and of fully employing 60 men.

In the BOILER-MAKING DEPARTMENT, which is separate from the iron shipbuilding premises, there is a complete set of tools and machinery, of the best description, capable of employing 150 men.

In the BLACKSMITH SHOP there are 12 forges, all blown by fan-blast, with cranes attached to the principal ones, and each forge having a complete assortment of tools, for engineering, millwright, and shipbuilding purposes.

The MILLWRIGHT and PATTERN-MAKERS' DEPARTMENT has a full assortment of all kinds of joiner and millwright's tools and fixtures, for the employment of 25 men, with a large stock of the most modern and useful patterns, which will be given over with the works.

There are also the necessary machinery and tools for carrying on the BRASS-FOUNDING and FINISHING BUSINESS, and PLUMBER and COPPERSMITH WORK, to a large extent.

The whole establishment, if fully employed, is capable of turning out work to the amount of £60,000 or £70,000 a-year; and having been for several years, and still being, in full operation, the purchaser will have the advantage of commencing business immediately.

The greatest facilities of communication are afforded, by regular trading steam and other vessels, from Aberdeen to London, Hull, Newcastle, and Leith, in the south; and Inverness, Wick, Orkney, and Shetland, in the north.

The extensive improvements on the harbour, now going on, and the projected railway schemes in connection with Aberdeen, afford every prospect of full employment for a work of this description, for a long period to come.

If the purchaser were desirous of removing the plant elsewhere, the cost of transmission would be comparatively small; and the buildings are so constructed as to be convertible into other manufacturing purposes, at little expense, as there are three fixed steam-engines on the premises.

The price of the works, and other particulars, will be arranged so as to suit the convenience of the purchaser.

For further information, apply to Mr. J. Hunter, W.S., 13, Hill-street, Edinburgh; Wm. Robison, advocate, 58, Castle-street, Aberdeen; or to Mr. Vernon, at the works, who will show the premises, and, on application, forward a plan of the buildings, and inventory of the machinery, tools, &c.—Aberdeen, Nov. 10, 1846.

TO BE LET, the PARK-HILL MINES, DEAN FOREST, GLOUCESTERSHIRE—containing ONE MILLION TONS OF COAL, and ONE MILLION TONS of rich IRON ORE, which, being calcareous, smelts well with argillaceous ironstone, and may be delivered in large quantities to the Staffordshire, Shropshire, and Welsh iron-works, at a price far below the cost of local ironstones. The mines are drainable by level, and can be opened at a trifling expense; and, were blast-furnaces erected, their produce might be smelted on the spot into excellent iron.—Apply (post-paid) to Henry R. Fryer, Esq., solicitor, Coleford, Gloucestershire.

UNITED STATES MINES.

COPPER ORE, from the best localities, as Grey, Black Oxide, and Sulphuret.
COBALT OXIDE, yielding from 5 to 80 per cent.
CHROME, yielding from 30 to 47 per cent.
MANGANESE, yielding from 75 to 90 per cent.
LEAD ORE, of the best quality.
ZINC, in form of Blende and Calamine.
Likewise, SOAP STONE, WHITE VITREOUS FELSPAR, BLACK LEAD, PURE WHITE LEAD, MICA, in small and large sheets.

THE ABOVE NATURAL PRODUCTIONS may be obtained in any quantity, and on the most reasonable terms, by applying to Dr. Lewis Tenchtwanger, New York City.

CORNISH MINES.—It is intended to publish shortly, by SUBSCRIPTION, AN ACCURATE

Map of the Mogan Mining District:

Shewing all the known LODES, CROSS-COURSES, SOILS, BOUNDARIES of SETTS, &c., in and of the following MINES:—South Wheal Basset, North Wheal Basset, South Wheal Francis, West Basset, Carn Brea, Cook's Kitchen, Tincroft, East Pool, East Wheal Crofty, North Pool, Wheal Agar, West Tolgus, East Wheal Seton, Wheal Seton, Wheal Sparrow, West United Hills, Wheal Sally, West Wheal Towan, Wheal Ellen, West Wheal Mary, Wheal Maude, Wheal Robartes, &c.—Also, a BOOK OF REFERENCE thereto, containing the NAME of every LODE, and all possible useful and interesting information thereon. By R. SYMONS, C.E., Truro.

Price 27s., the Map coloured.—Subscribers names received by the author; also at the office of the *Mining Journal*, 26, Fleet-street, London; and by Mrs. Heard & Sons, Truro.

*** A few copies of the maps of Gwennap and Camborne Mines remain for sale.

Just published,

TURNING AND MECHANICAL MANIPULATION.

By CHARLES HOLTZAPFFEL, A. Inst. C.E., &c.

This work is intended for general reference and practical instruction on the lathe, and the various mechanical pursuits followed by amateurs. To be comprised in six volumes.

Vol. I. (Second Thousand).—On Materials—their differences, choice, and preparation—various modes of working them, generally without cutting tools.
8vo. cloth, pp. 462, and 315 woodcuts. Price 15s.,

Vol. II.—On the Principles of Construction, Action, and Application of Cutting Tools, used by hand—namely, chisels and planes, turning tools, boring tools, screw-cutting tools, saws, files, shears, and punches; and also of machines derived from these hand-tools,
8vo, in cloth, pp. 562, and 711 woodcuts. Price 30s.

Published by Holtzapffel and Co., engine, lathe, and tool manufacturers, 64, Charing-cross, and 127, Long-acre, London; and to be had of all booksellers.

The Prospectus, with Table of Contents, free by post.

GLENKENS LEAD AND COPPER MINES, KIRKCUDBRIGHTSHIRE.—In consequence of MINERALS, of considerable value, having been found on the ESTATES in which the GLENKENS MINES are situate, an Act of Parliament has been obtained, to enable the trustees to GRANT MINERAL LEASES. These mines are situated in the centre of a mineral country, and in the vicinity of the flourishing lead works of Carsphairn, Lead Hills, the Newton Stewart, and Heston Island Copper Mines, the Kirkcudbrightshire Mining Company's works, and others in that part of Scotland.

The proprietor has been, for the last two years, exploring and opening the ground; and five promising lodes have been proved, which are now being opened and extended by Cornish miners. There being every prospect of a most satisfactory result at an early period, as appears from the reports of the several mine agents who have inspected the lands, as also of the captain now superintending the works, a company is being formed, to give the mines a fair trial, on the principle of the Cost-book system, by dividing the interests into 1000 shares, of which some few still remain unappropriated.

Plans of the sett, comprising about 1200 acres, and the several reports, may be seen, and every information obtained, at the offices of Messrs. Bullock and Luscombe, No. 35, Lincoln's Inn-fields, to whom applications for shares must be made.

VENTONGIMPS MINING COMPANY.

(FORMED ON THE COST-BOOK SYSTEM.)

The shareholders in the late Cornubian Mining Company, and others disposed to join in the prosecution of the works at the above sett, are informed that the whole of the surface works are now completed, including the erection of a powerful engine and all necessary buildings, and that, on application as below, they may receive shares on equal terms with the original projectors; and, as the number of shares to be disposed of are but limited, early applications are recommended. The sett is divided into 1000 shares, and the total cost and outlay, to ensure results, has been estimated not to exceed £5 per share.

Office, No. 4, Austinfriars. J. J. ISELIN, Hon. Sec.

VICTORIA TIN MINING COMPANY.

(Late the Wheal Fortune Consols and other Setts.)

ON THE COST-BOOK SYSTEM.

Capital 10,240 shares, of £2 each.—Deposit £1 per share.

DIRECTORS.

JOHN HOLMES, Esq., *Chairman.* | HENRY J. PRESTON, Esq.
Capt. HAMILTON, J.P. | W. HOLMES, Esq.
SAMUEL HOLDSWORTH, Esq. | WILLIAM GARROW, Esq.

LOCAL MANAGERS.

Capt. JAMES CHYNOWETH. | Mr. THOMAS JULIAN.

BANKERS—Commercial Bank of London, Lothbury, and Henrietta-street, Covent-garden.
Sir Claude Scott, Bart., and Co., Cavendish-square.

SECRETARY—Lieut. W. H. Smith, R.N.

Notice is hereby given, that the directors have completed the allotment of the shares of this company, and ISSUED the LETTERS of ALLOTMENT. By order,
1, Copthall Chambers, London, Nov. 16, 1846. W. H. SMITH, Secretary.

WHEAL BARBARA SILVER-LEAD AND COPPER MINE, two miles from the port of WADEBRIDGE, CORNWALL.

Capital £12,800, in 2560 shares, of £5 each.—Deposit 30s. per share.

REGISTERED PURSUANT TO ACT.

This mine is in a district long known as productive of silver-lead and other ores; on the east the Treburget Mine has produced immense quantities. The proprietors have driven an adit about 50 fathoms, and sunk a shaft on a large lode, highly productive, depth considered, of silver-lead and copper ores; an assay, by Mr. Richard Rodda, of St. Austell, gave 44 oz. 12 dwts. to the ton of lead, and other lodes are known to exist within the sett.

The proprietors retain one-half of the shares, free of deposit, but subject to calls, as consideration for the property and cost up to August last—the remaining 1280 shares pay the deposit of 30s. each, to provide the engine, and to carry on the works which the proprietors confidently expect will shortly become profitable.

About one-half of the 1280 shares are yet to be appropriated, for which application may be made to the directors, at the company's office, 8, Gresham-street, London, where reports, prospectuses, maps, specimens, leases, &c., may be seen.

8, Gresham-street, London, Nov. 12, 1846.

WHEAL CURTIS COPPER MINING COMPANY, in the PARISH OF CROWAN, NEAR CAMBORNE, CORNWALL.

In 6000 shares, of £4 each.—Deposit £1 10s. per share.

PROVISIONAL DIRECTORS.

GEORGE PILKINGTON, Esq., C.E., late Captain Royal Engineers.
GEORGE EVANS, Esq., C.E.
MARTIN STAPLEY, Esq., Homerton.

(Other directors will be shortly published.)

BANKERS—Messrs. Cunliffes, Brooks, Cunliffe, and Co.
SOLICITOR—Henry Bull, Esq.
SECRETARY—E. Mills, Esq.

This mine is in its infancy, the shaft being now only at the depth of 47 fathoms below the adit; nevertheless, it has already produced upwards of £10,000 by its copper ore, one-half of which sum the late Mr. Thomas Teague, of Redruth, the celebrated mining captain, who worked this mine at his own individual cost, appears to have expended in carrying on the works, so that by reason of his decease the mine left in the hands of the executors was abandoned at the very point to which his hopes of wealth had been directed, and at a time when she was (according to Mr. Nicholas Vivian's and Joseph Vivian's report, as printed in prospectus) very productive. They also say, "it is our decided opinion that a valuable and profitable mine will be found if prosecuted to deeper levels." These gentlemen (the Vivians) are so well-known that their opinions are relied on by those accustomed to mining operations.

To follow up the foregoing opinions, it is necessary to fork the mine, and to sink a new shaft to the westward of the present one, directly over a rich bed of ore mentioned in the report of Capt. Richard Rowe and Mr. Henry Thomas, F.G.S., as in prospectus, and to open new and deeper levels, as well as to work effectually those already made, which Capt. Teague's decease prevented him accomplishing, and to carry on which works a powerful 70-inch engine has been required; therefore a company has been provisionally formed to carry out these objects, for which purpose it has been determined to distribute the interest of this mine into 6000 shares of £4 each.

A deposit of 30s. is required to be paid on each share, and it is expected that no further portion of the £4 will be necessary.

Of the 6000 shares referred to, 3000 have been taken and paid on by the promoter of this company, who has thus given the best possible proof of his opinion of the prospect of valuable remuneration to adventurers; and of the other 3000 shares 1000 only remain to be allotted, since the issue of the first prospectus.

No call shall exceed the sum of 5s. per share. No responsibility will attach to any shareholder beyond the deposits paid, and the calls to be made on the shares: this to be secured by registered deed of settlement, as well as law and equity can devise.

There are six lodes in this sett, each considered equal in value to that of the neighbouring mine, called the Wheal Abraham, which yielded £300,000. Therefore £1,800,000 may be taken from this mine by well-directed energy.

It is a well-known fact that shares in mines recently opened under inferior prospects to those which Wheal Curtis presents, were purchased at as low a price as those now offered to the public, and have since realised £500 and upwards per share; and such is the confidence of the committee in the capabilities of this mine that they have taken upon themselves to purchase at auction the splendid 70-inch engine of the Hallenbeagle Mine, its boilers, pumps, and other materials, by which £1000 at least have been saved to the company. They are also pushing forward the proposed works with vigour, the progress which since the first prospectus is stated in the second one.

Applications, with respectable reference, for the small proportion of shares remaining, as above stated, will not be received after the 1st December next. All letters for shares to be addressed to the offices, Gresham Rooms, Basinghall-street, to

E. MILLS, Secretary, pro tem.

THE PATENT SAFETY FUSE, FOR BLASTING ROCKS IN MINES, QUARRIES, AND FOR SUBMARINE OPERATIONS.—This article affords the SAFEST, CHEAPEST, and most EXPEDITIOUS MODE of effecting this very hazardous operation. From many testimonies to its usefulness with which the manufacturers have been favoured from every part of the kingdom, they select the following letter, recently received from John Taylor, Esq., F.R.S., &c.:—"I am very glad to hear that my recommendations have been of any service to you; they have been given from a thorough conviction of the great usefulness of the Safety Fuse; and I am quite willing that you should employ my name as evidence of this."

Manufactured and sold by the Patentees, BICKFORD, SMITH, and DAVEY Camborne, Cornwall.

NOTICE TO THE MANAGERS OF MINING COMPANIES, SMELTING WORKS, &c.

Mr. MITCHELL (late Mitchell and Field) begs to announce, that ASSAYS and ANALYSES of all descriptions of ORES, MINERALS, and FURNACE PRODUCTS, are conducted at his LABORATORY, 23, HAWLEY-ROAD, KENTISH TOWN, to which direction all communications are to be addressed.

N.B.—Instruction in all branches of assaying and mineral analysis as usual.

STEAM TO INDIA VIA EGYPT, MALTA, ITALY, ALEXANDRIA, AND THE PENINSULAR PORTS.

PASSAGE TO BOMBAY, MADRAS, AND CALCUTTA.

The Peninsular and Oriental Steam Navigation Company BOOK PASSENGERS for CEYLON, MADRAS, and CALCUTTA direct, by steamers leaving Southampton on the 20th, and for Alexandria, *en route* to Bombay, on the 1st of every month.

A steamer from Southampton leaves the 1st and 20th of every month for Malta, where are steamers to Naples, Genoa, Civita Vecchia, three times a month.

STEAM TO CORUNNA, OPORTO, VIGO, LISBON, CADIZ, AND GIBRALTAR.

A steamer leaves Southampton on the 7th, 17th, and 27th of every month.

Apply at the Peninsular and Oriental Steam Navigation Company's offices, 51, St. Mary Axe, London, where only passages can be secured throughout.

MINING PROPERTY.—CAPITALISTS who are disposed to INVEST in CORNISH and FOREIGN MINES, will find the present opportunity very favourable for so doing. From large sums having been lately diverted from such investments for railway speculations, standard mines are now selling at prices that will pay the purchaser 20 per cent. per annum for his outlay. There are also other mines that are on the eve of paying dividends, which can be recommended with confidence.

Applications to be made to Mr. JAMES HERRON, mining agent, No. 3, Adam's-court, Broad-street, London.

MESSRS. R. CLARK & CO. beg to acquaint their friends and the public in general, that they have taken OFFICES as below, where they intend to carry on BUSINESS as STOCK, SHARE, and MINING AGENTS; relying with confidence upon the method adopted by them for conducting all business entrusted to their agency, Messrs. R. C. & Co. solicit a continuance of that support it will be, by strictest attention to all orders, their endeavour to deserve.

N.B.—Money advanced upon scrip and other securities.

3, Austinfriars, Broad-street, Oct. 17, 1846.

MR. JOHN CHAPMAN, ACCOUNTANT, MINE AND GENERAL AGENT, 17, OLD BROAD-STREET, ROYAL EXCHANGE, Returns his grateful thanks to his friends for the countenance and support he has received from them since he commenced business. He begs leave to acquaint his friends, that he now also undertakes the BUSINESS of ACCOUNTANT, in which branch he hopes to receive additional favours from them.—Nov. 4, 1846.

MR. T. P. THOMAS, MINING AGENT, and DEALER in RAILWAY SHARES, ENGLISH and FOREIGN STOCK, REMOVED from 80, Old Broad-street, to 18, THREADNEEDLE-STREET, LONDON.—T. P. THOMAS is a BUYER of SHARES in North Roskear, Wheal Seton, Wheal Trelawney, West Wheal Jewel, and Wheal Mary Ann.

MR. R. TREDINNICK wants to PURCHASE 1-70th SHARE in NORTH ROSKEAR, at £300, and 1-94th SHARE in EAST WH. CROFTY, at £375; and to SELL 1-99th SHARE in WHEAL SETON, at £350.

Mining Offices, Three King's-court, Lombard-street, London.

MESSRS. LINTHORNE, JONES, AND CO., STOCK, MINING, AND SHARE AGENTS,

*** Every information will be afforded as to the markets and prices of the above, by application (post-paid) at their offices,

48, *THREADNEEDLE-STREET, LONDON.*

JOHN HARVEY, SHAREBROKER AND ASSAYER, *LISKEARD, CORNWALL.*

JAMES LANE, MINING SHAREBROKER, 75, *OLD BROAD-STREET, LONDON.*

WILLIAM TRENERY, DEALER IN RAILWAY AND MINING SHARES.—ESTABLISHED TEN YEARS.

OFFICES, No. 50, THREADNEEDLE-STREET, LONDON.

WILLIAM H. SMITH, MINING SHARE AGENT, 10, *WARNFORD-COURT, THROGMORTON-STREET.*

*** SHARES in many valuable MINES FOR SALE, and every information will be afforded, on application.

MINING OFFICES, 1, ST. MICHAEL'S-ALLEY, CORNHILL, LONDON.

WATSON AND CUELL, MINE AGENTS.—N.B.—STATISTICAL INFORMATION furnished (on application) to SHAREHOLDERS in MINES in Cornwall, Devon, Scotland, Ireland, Wales, and Spain.

CHARLES T. CRAPP, SHARE DEALER, *TAVISTOCK,*

Possessing facilities of acquiring the earliest information respecting the mines of this important district, proffers his services to gentlemen desirous of obtaining such; whilst his local connection affords him the assistance of the most efficient mining agents in furnishing reports, plans, &c., of mines, to those who may favour him with their instructions.

MESSRS. J. PAINTER AND CO., SHAREBROKERS, MINING AND GENERAL AGENTS,

25, *CASTLE-STREET, LIVERPOOL,*

AFFORD EVERY INFORMATION as to the STATE of the MARKETS, PRICES, &c., upon application.

WILSON & FRASER, 2, WELLINGTON-BUILDINGS, LIVERPOOL, and 13, EXCHANGE-PLACE, GLASGOW, have always ON SALE PIG-IRON, BAR-IRON, RAILWAY CHAIRS, and RAILWAY BARS.

WILLIAM FOX AND SON, No. 53, CASTLE-STREET, LIVERPOOL, have always on SALE PIG-IRON, RAILWAY BARS, CHAIRS, and IRON of every description.—TIN PLATES, WIRE, &c.

WHEAL BLENCOWE MINE.—WANTED, ONE or TWO SHARES in the ABOVE MINE.—Address, post-paid, with lowest price, to "A. Z." care of the Editor of the *Mining Journal*, No. 26, Fleet-street, London.—Also, A FEW SHARES in a very promising COPPER SETT, in Cornwall, offering great advantages, may be OBTAINED, on application (by letter) as above.

GREAT WHEAL ROUGH TOR CONSOLS.—MINING CAPTAIN WANTED.—He will be required to produce testimonials of his ability to conduct this concern with economy and judgment; he must have a thorough knowledge of underground operations in their various departments, as well as of the arrangement and application of machinery. None need apply except first-class agents, of great experience. Salary £10 per month.—Application to be made by letter, addressed to W. A. Thomas, Esq., of 50, Threadneedle-street, London, under cover, to Mr. Josiah H. Hitchins, Tavistock, London.—N.B. A STEAM-ENGINE WANTED, of from 40 to 60-inch cylinder.—Nov. 19, 1846.

CONSOLIDATED TRETOIL MINING COMPANY.—The directors of this company hereby give Notice, that the QUARTERLY GENERAL MEETING of the shareholders will be HELD at these offices on Thursday, the 26th inst., at One o'clock P.M. precisely. HENRY THOMAS, Secretary.

Mining Offices, 8, George-yard, Lombard-street, London, Nov. 10, 1846.

UNITED HILLS MINING COMPANY.—Notice is hereby given, that the SCRIPHOLDERS of this company, intending to take NEW SHARES, pursuant to the resolutions of the special general meeting of the company held this day, must deposit in the office of the company, No. 5, Adam's-court, Broad-street, their SCRIP SHARES, and PAY the sum of £3 10s. for each new share allotted to them, on or before the 12th day of December next, otherwise they will forfeit their right to have such new shares. Every shareholder will be entitled to one new share for every four scrip shares so deposited and paid upon. By order of the board,

Nov. 12, 1846. JAMES SMITH, Secretary.

[The resolutions referred to appeared in the *Mining Journal* of the 14th Nov.]

MERIONETHSHIRE SLATE & SLATE SLAB COMPANY.—The directors regret, that, in consequence of the numerous applications for shares, they have been compelled to reject many entirely, and to allot, in almost every case, but a small proportion of the shares required.

1, Copthall-court, Nov. 18, 1846.

SULPHATE OF BARYTES.—WANTED, STONE of GOOD QUALITY.—Address "A. G. S.," Saddle Inn, Liverpool, stating quantity and price, delivered at Liverpool or Runcorn.

SECOND-HAND STEAM-ENGINES.—WANTED, several SECOND-HAND ENGINES, either condensing or high-pressure, with or without boilers, but in working condition—from 10 to 40-horse power, to drive machinery.—Address (stating price and particulars) to "J. R. M.," contractor, office of Messrs. Dawson and Son, 74, Cannon-street, City, London.

TO ENGINEERS.—WANTED, in a small engineering establishment, as FOREMAN and MANAGER, a person practically experienced in general mechanics, and thoroughly conversant with the manufacturing of land and pumping engines, and competent to take orders and execute them in a first-rate style of workmanship.—Application to be made by letter, addressed "A. B. and Co." Box 236, Post-office, Sheffield, stating salary, and situation previously held, &c., prior to an interview.—No one need apply who cannot give the most satisfactory references.

TO CAPITALISTS.—The ADVERTISER is in possession of an IMPROVEMENT of an ARTICLE of GREAT CONSUMPTION in all MINES, QUARRIES, EXCAVATIONS, &c., and will COMMUNICATE PARTICULARS to any honourable gentleman, or company, that may be disposed to carry on the MANUFACTURE of the ARTICLE. From £700 to £800 will be quite sufficient to secure patent and carry on the whole business. The new article will entirely supersede the article now in use.—Address (post-paid) to "S. F." care of Mr. Josiah Sims, engineer, &c., Tavistock.

TO RAILWAY COMPANIES, COKE BURNERS, IRON FOUNDERS, &c.

CHURCH'S PATENTED IMPROVEMENTS IN THE MANUFACTURE OF COKE, AND CONSTRUCTION OF COKING OVENS.—LICENSES TO USE THIS PATENT may now be obtained, on application to Messrs. Theobald and Church, Gas Works, Colchester, Essex.

HOLBORN HILL, SNOW HILL, AND FARRINGDON-STREET VIADUCT COMPANY.—During the past 20 years, various schemes have been devised for superseding the dangerous descents on both sides the Fleet sewer—viz.: Skinner-street and Holborn Hill—without producing any plans sufficiently feasible to induce parties to take them up, or to obtain the aid of the City authorities. That there is no part of London requiring alteration more than that portion of the western entrance into the City, from St. Andrew's to St. Sepulchre's Churches, is universally acknowledged; and we are glad to observe the formation of a company solely for this purpose, leaving railways and termini out of the question. From Holborn Hill, to the corner of Farringdon-street, the approach will embrace a portion of the site of parts of the present buildings on the south side of the street, so as to leave 40 ft. of the present roadway on the north side for those vehicles or passengers going to Farringdon-street, Victoria-street, Snow Hill, and Smithfield, or who prefer it; but, from Farringdon-street, to the top of Skinner-street, it will embrace the whole width of the latter, and by this arrangement those who prefer the old route will go round by Snow Hill. Buildings, of handsome elevations, with shop fronts, will abut upon the viaduct on both sides of Skinner-street, and on one side of Holborn, as well as on the old pavement beneath, and this plan would render the neighbourhood one of the most spacious and airy in the City of London. A further proposal—one we think a most judicious one, and which, while it will, doubtless, pay the shareholders a good per centage for their capital employed, will be eventually a boon to the public—is, that, after payment of a fair interest on the capital and all expenses, the surplus shall be appropriated to form a fund for the repurchase of all the shares; and when such repurchase shall have been effected, and all liabilities provided for, the whole to be offered to the City of London, to be kept up by them, free of toll, for the use of the public. The viaduct itself will be about 900 feet long and 50 feet wide; and the bridge over the valley of Farringdon-street will be 95 feet span and 22 feet headway. The whole design is simple and complete, easily accomplished in an engineering point of view; and, as the removal of the five houses, between Victoria-street and Field-lane, form that part of the City improvements, it will materially lessen the costs to the company. The capital is 200,000*l.*, in 20,000 shares of 10*l.* each.

COAL MINES IN THE PYRENEES.—Count Castellane has caused different points in the Pyrenees to be examined, in the hope of discovering veins of coal. After considerable expense, his efforts have at length been crowned with success, and a vein has been discovered by him in the commune of Orignac, in the district of Bagneres, which gives great hopes. The depth of the layer discovered is about 10 ft. English, and runs in a horizontal line in every direction, without it being able to ascertain to what extent. M. de Castellane has purchased part of the ground in which the mineral is imbedded, and has demanded the concession of the mine. The matter has been laid before the administration of the department of the Hautes-Pyrenees.

A terrible explosion is stated to have taken place in the quicksilver mines near Idria, in Illyria, by which several workmen have lost their lives. The details are not known.

WONDERFUL EFFICACY OF HOLLOWAY'S OINTMENT AND PILLS.—Nine months since, a gentleman residing in Glasleugh, county Monaghan, had an opening made from the hip to the knee, and a great deal of diseased flesh removed. For three years he had suffered night and day, although he consulted all the most skilful surgeons and physicians he could hear of—using baths, liniments, &c., without effect. He expected to be a cripple for life; yet, by the use of Holloway's ointment and pills, he is now cured, and enabled to attend to business for the last six months as though nothing had happened. His address is known to the proprietor of the *Armagh Guardian*.—Sold by all druggists, and at Professor Holloway's establishment, 244, Strand, London.

NO BREWING UTENSILS REQUIRED.

PATENT CONCENTRATED MALT AND HOP EXTRACT enables PRIVATE INDIVIDUALS to MAKE FINE HOME-BREWED ALE, WITHOUT EMPLOYING ANY BREWING UTENSILS.—It has only to be dissolved in hot-water and fermented.—Sold, in jars, for medicinal and other purposes, at 1s. and 1s. 6d.; and in bottles for brewing 9 to 18 gallons and upwards of ale, at 6s. 6d. and 12s. 6d. each, by the BRITISH NATIONAL MALT EXTRACT COMPANY, 7, NICHOLAS-LANE, LOMBARD-STREET; Petty, Wood, and Co., 53, Threadneedle-street; Wix and Sons, 22, Leadenhall-street; Batty and Co., 15, Finsbury-pavement; De Castro and Peach, 65, Piccadilly; Hockin and Co., 38, Duke-street, Manchester-square; and oilmen and grocers generally.

Also, just published, and may be had gratis,

NATIONAL BREWING: A GUIDE to the USE of CONCENTRATED MALT AND HOP EXTRACT, for BREWING and WINE MAKING; to which is added, MEDICAL OPINIONS relative to the virtues of malt and hops.

CURTIS ON NERVOUS AND GENERATIVE DISEASES.

Just published, a Medical Work, in a sealed envelope, 3s., and sent, post-paid, for 3s. 6d.

MANHOOD: the CAUSES of its PREMATURE DECLINE, with plain directions for its perfect restoration; addressed to those suffering from nervous debility or mental irritation, followed by observations on Marriage; the treatment of diseases of the generative system; illustrated with cases, &c. By J. L. CURTIS and Co., consulting surgeons, 7, Frith-street, Soho-square, London.

TWENTY-NINTH THOUSAND.

Published by the authors, and may be had at their residence; also sold by Strange, 21, Paternoster-row, London; Guest, 51, Bull-street, Birmingham; T. Sowler, 4, St. Ann's-square, Manchester; G. Phillip, South Castle-street, Liverpool; W. and H. Robinson, booksellers, Greenside-street, Edinburgh; Campbell, druggist, Argyll-street, Glasgow; and sold in a sealed envelope by all booksellers.

REVIEWS OF THE WORK.

MANHOOD. By J. L. CURTIS and Co. (Strange)—In this age of pretension, when the privileges of the true are constantly usurped by the false and fraudulent, it is difficult to afford the sufferer from nervous debility, the unerring means of judgment where to seek relief. The authors of this work have obviated the difficulty. Their long experience and reputation in the treatment of these painful diseases is the patient's guarantee, and well deserves for the work its immense circulation.—*Era.*

CURTIS ON MANHOOD (Strange).—A perusal of this work will easily distinguish its talented authors from the host of medical writers whose pretensions to cure all diseases are daily so indecently thrust before the public. Its originality is apparent, and its perusal breathes consolation and hope to the mind of the patient.—*Naval and Military Gazette.*

CURTIS ON MANHOOD should be in the hands of youth and old age. It is a medical publication, ably written, and developes the treatment of a class of painful maladies which has too long been the prey of the illiterate and designing.—*United Service Gazette.*

Messrs. Curtis and Co. are to be consulted daily at their residence, No. 7, Frith-street Soho-square, London.

Country Patients are requested to be as minute as possible in the detail of their cases. The communication must be accompanied by the usual consultation fee of £1, and the work sent to any address for 3s. 6d. in postage stamps, direct from the authors, or either of the above agents.

The Nineteenth Edition, price 2s. 6d.; free by post, 3s. 6d.

THE SILENT FRIEND: a medical work, on the concealed cause of constitutional or acquired debility, loss of muscular energy, and derangement of the generative system, nervous debility, constitutional weakness, excessive indulgence, &c.; with Observations on Marriage, &c. By R. and L. PERRY and Co., surgeons, London. Published by the authors, and sold at their residence; also by Strange, 21, Paternoster-row; Hannay & Co., 63, Oxford-street; Noble, 109, Chancery-lane; Gordon, 146, Leadenhall-street; Purkiss, Compton-street, Soho, London.

Part I. of this work is addressed to those who are prevented from forming a matrimonial alliance, and will be found an available introduction to the means of perfect and secret restoration to manhood.—Part II. treats upon those forms of diseases, either in their primary or secondary state, arising from infection—showing how numbers neglect to obtain competent medical aid, entail upon themselves years of misery and suffering.

The CORDIAL BALM of SYRIACUM is a stimulant and renovator in all cases of constitutional or acquired debility; by its use the whole system becomes restored to a healthy state of organisation. Sold in bottles, price 11s. and 33s.

THE CONCENTRATED DETERSIVE ESSENCE.—An anti-syphilitic remedy for searching out and purifying the blood from venereal contamination, scurvy, blotches on the head, face, and body, ulcerations, and those painful affections arising from improper treatment, or the effects of mercury, or secondary symptoms. Price 11s. and 33s. per bottle; also £5 cases.

PERRY'S PURIFYING SPECIFIC PILLS are perfectly free from mercury, capaiva, and other deleterious drugs, and may be taken with safety without interference with or loss of time from business, and may be relied upon in every instance. Sold in boxes, at 2s. 9d., 4s. 6d., and 11s. each, by all medicine vendors—of whom may be had the *Silent Friend*.—Messrs. R. and L. Perry and Co. may be consulted at No. 19, Berners-street, Oxford-street, London, daily.

ON THE SECRET INFIRMITIES OF YOUTH AND MATURITY,
With 25 coloured engravings.

Just published, sixteenth thousand (in a sealed envelope), price 2s. 6d.; or post-paid to any address, for 3s. 6d., in postage stamps, or Post-office order,

SELF-PRESERVATION; A Medical Treatise, on Marriage, and on the Secret Infirmities and Disorders of Youth and Maturity. Illustrated with 25 coloured plates on the anatomy, physiology, and diseases of the urinary and reproductive organs, explaining their various structures, uses, and functions, and the injuries that are produced in them, by solitary habits and other excesses. With practical observations on the treatment of nervous debility, local and constitutional weakness, syphilis, strictnre, and other diseases of the urethra. By SAMUEL LAMERT, consulting surgeon, 9, Bedford-street, Bedford-square, London, Matriculated Member of the University of Edinburgh, Honorary Member of the London Hospital Medical Society, Licentiate of Apothecaries Hall, London, &c.

REVIEWS OF THE WORK.

"The author of this singular and talented work is a legally qualified medical man, who has evidently had considerable experience in the treatment of the various disorders, arising from the follies and frailties of early indiscretion. The engravings are an invaluable addition, by demonstrating the consequences of excesses, which must act as a salutary warning to youth and maturity, and by its perusal, many questions may be satisfactorily replied to, that admit of no appeal, even to the most confidential friend."—*Era.*

Published by the author; and may be had at his residence; also from S. Gilbert, 52, Paternoster-row; Hannay and Co., 63, Oxford-street; Starie, 23, Tichborne-street, Quadrant; Gordon, 146, Leadenhall-street, London; Newton, 16, Church-street, Liverpool; and all Booksellers.

At home for consultation daily, from nine till two, and from five till eight; and all letters immediately replied to, if containing the fee of £1, for advice, &c.—9, Bedford-street, Bedford-square, London.

Original Correspondence.

CENTRAL HEAT.

SIR,—Mr. De la Haye's arguments, against my theory of central heat or fusion, do not appear to me conclusive. Perhaps the most active seat of volcanic action, on the surface of the globe, is Iceland; and this district is far enough removed from the electrical atmosphere of the tropics, to prove that Mr. De la Haye's supposition respecting electricity, as being the agent in occasioning earthquakes, is erroneous. Besides, electricity is almost perpetually attendant upon tropical climates, and, therefore, earthquakes ought to be equally prevalent and dependent upon the amount of electricity at the time of their occurrence; but this is not found to be really the case. Neither can any argument against my theory be substantiated from the very superficial observations of miners in various quarters of the globe. The deepest mines penetrate to a depth utterly insignificant, in comparison with the earth's semi-diameter, and not exceeding $\frac{1}{1000}$th part of that semi-diameter.

A mole, burrowing in the soft mould of a mountain side, might as well attempt to disprove the existence of hard rock in the heart of that mountain, as that a miner should draw conclusive arguments against central heat, or fusion, from the evidences he can collect within the limited field of his operations. Besides, what are the principal formations, which form this narrow band or shell, under which the miner usually works? They are merely strata, deposited by the agency of the gulf streams and currents, of a primeval ocean—just as strata are, at the present day, slowly accumulating in the depths of the sea, as it now exists.

All stratified rocks have been deposited from water, and consolidated by the pressure of the superincumbent fluid; and this has taken place subsequently to the formation of the waters of the sea, whose formation must again have been subsequent to the fused and fluid state of the whole earth. When the earth was without *form*—(*i. e.*, beauty or finish)—and void, I consider that it was a globe of fluid matter of intense heat, and this matter was the base of all those substances, now termed undecompounded or simple substances, except oxygen. At this era, oxygen was imparted to this fluid and heated mass; and, uniting with various volumes of this earth's base, it formed the metals, and other *supposed* simple substances—all of which I believe to be compounds of one base, with various volumes of oxygen, inseparable, even by galvanic action, from the base. Nitrogen and hydrogen were thus produced; for I conceive that both these gases contain oxygen, inseparably united in different proportions to the same base. The earth being then surrounded by copious fumes of oxygen, nitrogen, and hydrogen, there was wanting only the agency of electricity to fire the oxygen and hydrogen, forming at once the waters of the ocean, and leaving the superabundant oxygen to unite mechanically with nitrogen, to form the atmosphere. Next, the oxygen, uniting again in further proportions with the substances now called undecompounded, formed with them the various oxides of silicon, calcium, aluminium, &c., &c.; and the bulk of these matters, being materially increased thereby, portions of the earth's surface became elevated above the surface of the sea, and all these chemical changes were, no doubt, brought about by the unknown agencies of heat, light, electricity, &c. Thus, galvanic action can separate a certain amount of oxygen from the base with which it is united; and a corresponding negative action may render oxygen quite inseparable from the base, by any known means of operation. For example, I consider gold as a compound of oxygen with the universal base, and that the oxygen is inseparable by any process with which we are acquainted; and this inseparable union has, probably, been brought about by the agency of heat or electricity, or both, in a manner of which we have at present no correct ideas.

This universal base was capable of uniting, in endless variety of proportions, with oxygen, under the influence of heat, electricity, magnetism, &c., forming what are now supposed simple substances, and to which oxygen may in general be added in various proportions; but from which we cannot abstract more than a certain quantity, leaving them in their former condition. Privation of oxygen characterises a metal, and the common base, therefore, predominates in metals united with a smaller dose of oxygen; whilst in other substances, such as nitrogen, silicon, sulphur, &c., the common base is united inseparably with larger doses of oxygen. It has been proved, that oxygen can almost instaneously pervade a molten mass of glass, iron, &c.—therefore, the molten and fluid state of the earth's body presented every facility to the penetration of the oxygen; whilst the mysterious agencies of electricity, heat, and magnetic influence, accomplished its various unions with the common base, to form the present supposed undecompounded substances.—ROBERT MUSHET: *Coleford, Nov.* 18.

CENTRAL HEAT.

SIR,—In reading the discussion of your correspondents on central heat, a thought has struck me, which, possibly, may not be new; I may have read it in some work, which I cannot now call to mind, but it seized the imagination with the force of an original idea. When we consider that space is void, and, therefore, void of heat—and that our earth is hung in space, in the midst of an absence of heat, so great that the cold must be far greater in intensity that anything the imagination is able to conceive—in short, infinitely cold—it becomes quite evident, that, if our earth had no other heat than what it derives from the casual vicissitudes of the sun, it would be perfectly uninhabitable. Let us conceive an enormous mass, 7000 miles in diameter, colder than ice, infinitely colder than even frozen mercury and that this body received no heat, except what penetrated from the sun into the most insignificant amount of its superficial thickness, a few hours only out of the 24, even in the most favoured situations—that one-half of the earth's surface is at all times receiving no heat at all—and that of the other half, which does receive heat, there is only one central point, that at any one time receives the whole power of the sun's rays, which we know pierce with very sensible effect but a very few inches beneath the surface, even when acting with their greatest vigour—who can be sceptical as to central heat? And it is nothing but an enormous, blazing central fire, capable of the intensest fusion, that can be at all able to keep us warm and unfrostbitten before such a tremendous enemy as the space that surrounds us. Who could winter through the long polar nights, if there was no heat but that afforded by the sun. In short, the heat supplied by that great luminary is so trivial, compared to what the earth really requires, in passing through space, that it must be considered in amount as nothing at all. It cheers the surface, calls all things into life, and produces the amazing effects for which it was intended; but without central heat, all his rays would avail no more, and make no deeper impression, on our frozen misery, than our parlour fire at home upon the icebergs of the Arctic Sea. This is a fearful and overwhelming consideration, and appeals so vividly to the imagination, that I think the thought is new. It explains fully the intense cold of high mountains, elevated above the central furnace, toward the dread region of eternal cold; and fully accords with and confirms the well-known fact, of greater temperature increasing in the earth at greater depth; whereas, were the sun the only warming medium, the cold, on the contrary, would increase excessively as we pierced deeper.

It was one of the remarkable conceptions of Sir Isaac Newton (I cannot at this moment point to the passage), that heat and matter were coexistent—that, were heat to vanish, matter would vanish also—that the collapse would be equivalent to annihilation; so that, to follow out the idea, it is only by the existence of this central heat, that the model of our globe exists at all. We know not how that heat may be produced, but its existence it seems impossible to deny. It is most probable that the centre of the earth, either the real or the magnetic centre, is the point of union of two grand electric poles, producing that intense heat this fluid only can produce—at once the cause and the effect of the phenomena of its mysterious currents, which become only more wonderful the more they are investigated, and to which are owing, perhaps, the very existence of the globe itself.—F.: *Nov.* 16.

PURIFYING COAL MINES.

SIR,—Your correspondent, "L.," dated Battersea, Oct. 23, states that he has invented a *grating* on the principle of a *great* safety lamp, to be placed in convenient places in fiery mines, and with doors to open in these gratings for the traffic. This grating, in case of an explosion, is intended to stop its reaching beyond a certain distance. Now, Sir, is this door to remain shut after such an explosion, or can it be opened, for an escape of the after damp, and to fetch out the men?—a few minutes' delay, and their doom is sealed. Another correspondent, in your last Number, also recommends to carry out the gas *in sacks or bags, air-tight!*—a very scientific proposition, truly: the boys in the pits would, doubtless, improve upon it; some of these lads are quick, and as wicked as young colts, and I should not at all wonder but they would make foot-balls of these aerial bags, and kick them out of the mine—thus saving the expense of haulage.

Blaenavon, Nov. 16. T. DEAKIN.

IMPROVEMENTS IN SHIPBUILDING—THE WAVE LINE.

SIR,—Before proceeding with my inquiries, respecting the most suitable form to be given to vessels intended for sea service, and whose propelling power is by pressure arising from the action of the wind on canvas, I will call your attention to a circumstance related in the *Times*, of Monday last, the 16th inst., which supports, and most curiously coincides, with the principles I have laid down, and in a most remarkable manner establishes my theory. Under the head of naval intelligence, amongst much other matter, appears the following—"H. M. screw steamer *Encounter, without machinery*, but under canvas, and H. M. sloop *Mariner*, 16, one of Symons's sharp-bottomed vessels, sailed from Pembroke dockyard at the same time for Plymouth"—the *Encounter*, with *flat bottom* and *wall sides*, arrived at Plymouth three days before the *sharp*-bottomed *Mariner*, which, as stated in the *Times*, "completely explodes the preconceived notion of sharp bottoms and swift sailing:" at the same time, I must remark, that the *Encounter* was not built with reference to what are conceived to be sailing qualities; but with the idea that steam, by means of the screw, was to be the propelling power, and for which she was intended to be adopted—the application of canvas being merely as an auxiliary power, not at all calculated on as the prime mover; and this chance experiment has gone further to prove the utter fallacy of the prevailing idea on the subject of sharp bottoms, than a whole volume of the most carefully arranged and logical arguments—at once demonstrating the unfitness of the sharp bottom, and incorrectness of Symons's views. I am glad to be able to cite the above fact from so good an authority, and especially so, as it bears in a more direct way on the subject I intended for the purport of my present letter.

In my letter, preceding the one in reply to "R. S. N.," I stated that I would next inquire into the resistance to a vessel's progress, offered by the water at different depths. I will again commence by laying down a proposition, to the correctness of which I think no one will hesitate to subscribe—"If not the density, at any rate the resistance, of water increases with the depth, on account of the pressure of the surrounding and superjacent portions of fluid?"

Therefore, to displace one cubic foot of water at 10 feet below the surface, will require 10 times more force than it would to displace a like quantity on the surface—because as water cannot be compressed into less space than it already occupies, in order to make way for any body moving through it, it must necessarily elapse before the substance pressing against it: such being the case, a cubic foot of water, at 10 feet depth from the surface, must overcome the pressure arising from the weight of nine similar portions of water resting upon it, before it can yield to the impulse—at the same time, that all the surrounding fluid on the same level is pressed upon in a similar manner, and, consequently, becomes more difficult to push aside; also, one cubic foot of water, at 10 feet below the surface, or at any other depth, weighs only just so much as one cubic foot of water on the surface—the fact being merely this, that the cubic foot at the lower depth is more difficult to remove from its position, on account of the pressure of the superincumbent portions of fluid; in like manner, that, in a pile of bricks, it would be much more easy to remove one from the top row than from the tenth row down—those in that row having the weight of the nine bricks above resting on them, and yet the individual brick is still only of equal weight with the one resting on the top—consequently, in displacing water, it requires just as much of the lower, as of the upper portions, of fluid, to make a counterpoise to the weight of the vessel—therefore, of two vessels, of equal weight, the one displacing more of the upper, and less of the lower portions of fluid, will meet with least resistance in sailing.

Now, admitting the above to be correct, it will readily be understood, how greatly the resistance is increased by the sharp-bottomed vessel, requiring to go so much deeper into the water, before it displaces a sufficient quantity to balance the amount of its weight; and when we take into consideration, that, on the vessel being put in motion, the resistance offered to its progress by the water increases with the square of the velocity, it becomes at once apparent how greatly her course is impeded by great draught.

I will, for the satisfaction of the general reader, explain why the resistance increases with the square of the velocity. Suppose the resistance to one square foot at the surface, when the vessel is going one mile an hour, is equal to 1; increase her speed to five miles an hour, and the resistance will be increased to 25, or five times five (termed mathematically the square of the velocity): the reason of this is—because, at five times the velocity, not only is the pressure on the square foot referred to, five times as great, but also, in going over five times the space, five times the quantity of water has to be thrown aside. Therefore, to disperse five times the quantity pressing with five times the force, requires an increase of motive power equal to 25 times the original quantity it did when the velocity was only at one mile an hour; then, with this rapid increase of resistance, how greatly must the effect be enhanced in the deeper water.

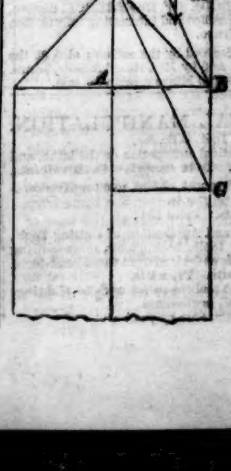
An immense difference of power would be necessary to propel one cubic foot of matter at the surface one mile an hour, and the same quantity, at a depth of 10 ft. under water, five miles an hour—the increase of necessary power being as 1 to 250. I hope I have made this sufficiently clear, so as to be understood by the general reader. I will in this hope close my letter, waiting until my next to apply the principle in a practical manner to shipbuilding.—NAUTICUS: *London, Nov.* 18.

P.S.—The letter of "R. S. N.," dated Gateshead, November 9, in the *Mechanics' Magazine*, is of too crude a nature to need reply.—N.

IMPROVEMENTS IN SHIPBUILDING—THE WAVE LINE.

TO THE EDITOR OF THE MECHANICS' MAGAZINE.

SIR,—I shall be glad to see the demonstration promised by "Nauticus," p. 450. It would have been much better if he had given it at once, instead of occupying so much space uselessly as he has done; for what on earth he means by the longest paragraph in his letter, I cannot make out. I brought forward the *Columbus*, to prove the fallacy of all that "Nauticus" had asserted—that she is *very* sharp in the bows—that she is the fastest sailing vessel belonging to this country—that she is very much drier than a full-bowed vessel; and, contrary to the statement of "A. H.," I believe her forecastle *never* was under water; and now I say, that she and every sharp-bowed vessel "will prove an exception to the rules" which "Nauticus" would wish to lay down. To show the logical powers of "Nauticus," and the fallacious conclusions he comes to, I beg to refer to a letter of his, published in the *Mining Journal* of the 24th of October. He says—"I will, therefore, now proceed to show that the obstruction to her course, arising from the other causes, pointed out as operating before the broadest part, is much increased by the narrowing of the bows, and consequent removal of the part far aft; they are the friction between the water and the bows, and the adhesion of the water to the bows and sides of the vessel." I will not here enter into a discussion of what "Nauticus" is pleased to term an absurdity, but I will maintain that the adhesion of water to the sides of the vessel is caused *entirely by friction*; for, if there were no friction between the atoms or particles of water and the side, there would be no adhesion; and I will now prove, that the above statement of "Nauticus" is fallacious, and that the friction between the water and the bows and sides of a sharp vessel is *less* than in the case of a bluff one. I will make use of the diagram given at p. 450, and alter the letters in the statement of "Nauticus" to suit it.



It is evident that the hypothenuse A G is less than the two sides C B and B G—the line C B forming the bluff bow, and B G *that part of the side cut off by the sharp bow* C G, *which* "Nauticus" *leaves out of the question altogether*—therefore, the surface being less, the friction is of course less—so much for friction!

And now as to the second part of his statement: he says—"The farther aft the extreme breadth is, the greater will be the distance between the stem and the section of that part—(prodigious!)—consequently, the quantity of water to be thrown aside to make way for the passage of the vessel, will increase with the length of the line from the stem to where it meets the broadest part on the side as shown in the accompanying figure by the line C B (see annexed figure), the quantity of water to disperse (*query*, displace), being represented by the triangle C B H. Let the bow be narrowed, so as to throw the broadest part farther aft to G: the quantity of water to throw aside will be represented by the triangle C G H, being exactly twice the quantity of that in the triangle C B H; because the two triangles being on equal bases, and between the same parallels, are, therefore, equal;

onsequently, C G H contains twice the surface of C B H." Now, where s "Nauticus?" At sea! all adrift! The bluff vessel in being moved through the water from B to H, will not displace the triangle of water C B H; but the parallelogram E C B H, and the sharp vessel, on being moved *an equal distance*, or from G to B, will displace the parallelogram E C G B; and as both parallelograms are on equal bases, and between the same parallels, they are of course *equal!* But "Nauticus"—clever "Nauticus!"—is not content with crying down what every scientific shipbuilder will tell him is of the greatest advantage—he must needs make the sharp vessel *go double the distance*, and then come to the sapient conclusion, that she has displaced twice the quantity of water that the bluff one has!

I need not follow him farther; but, before he writes again, I would recommend him to *think more*, and to know his subject better; and to recollect the *fact*, that wave-line vessels have *done* more and better than any other vessel can do; and also, that John Scott Russell's theory was *founded on practice*. I shall endeavour to obtain, from Capt. Green, of the *Columbus*, some information which may interest your readers. R. S. N.

Gateshead, Nov. 9.

GASES OF THE BLAST FURNACE.

Sir,—It would have been the most satisfactory reply, if Mr. R. Mushet had given the data respecting the blast engine which I inquired for, for he has made an error in calculating from those already produced; 200 parts of iron to 194 parts of earth, do not give a working burden of 33 per cent., as he erroneously states, but of something more than 50 per cent., which, although not so great as my error of transcription made it, is still a very questionable quantity. Other calculations, likewise, lead to a discrepancy of results; for 6126 lbs. of air, consumed in 20 minutes, will give, by the rule of 25 tons of air to 1 ton of pig-iron, 56 tons per week; on the other hand, 200 lbs. of iron in 20 minutes will give about 50 tons per week. Which of these is the correct make of the furnace?—from which sum did he strike his average, which ought to have been taken from a period not shorter than a week? I must still doubt whether Messrs. Playfair and Bunsen's experiments can be invalidated by such calculations.

Mr. R. Mushet's analogies do not enhance the opinion of his accuracy. "backwater" is caused by the impinging velocity of a narrow stream entering a wide channel—something of the sort may be imagined to exist in the recess of the boshes; but to speak of a stream of gas formed in the upper regions of the furnace, constantly descending the sides, is not less absurd, than to suppose a stream of salt water, formed at the extremity of a rapid river, flowing up the banks to its source. The next is worse; the passing off of the free oxygen is proved, by comparing the tube of a blast-furnace, filled with heated carbon, to the tube of a hot-air pipe, containing none at all! If Mr. R. Mushet makes cement, and not iron, as his letter implies, he may not be aware the heat is communicated to the tubes on the outside, and that there are no coals inside of them. Now, is it possible the oxygen can be changed, and yet free at the same time? I have trespassed too far to discuss cements, which I am glad there is a good sale for, as they must be more coherent than such reasonings, and of a more "agreeable colour" than your correspondent's style of controversy. The epithet, "Aheneus," I do not understand. Ferreus.

Coleford, Nov. 17.

RITTERBRANDT AND HIS "PATENT."

Sir,—It *has been asserted*, that Ritterbrandt's patent has hitherto remained a dead letter, and is likely to continue inoperative, from the expense of muriate of ammonia, and the action of the ammoniacal salt formed on the copper and brass work. It is *also asserted*, that muriate of ammonia had been *already* employed in reference to incrustations in boilers; and that long before Ritterbrandt's name was known to the public. These allegations did not originate with me, and I am not responsible for them. Further, it is stated, in the *Pharmaceutical Times*, that Dr. Ritterbrandt did send sulphate of ammonia as a substitute for the muriate of that salt. Assuming the fact as set forth, I mentioned that it argued gross ignorance. Why has that statement remained entirely and so long uncontradicted? It did not emanate from me; and in my letter, I expressly stated the case *hypothetically*. It seems the nitrate, as well as the acetate, of ammonia, are also included in the "patent." I incidentally mentioned nitrate of soda. Even admitting, *causa argumenti*, that my memory had been "at fault" for once, in the matter of an incompatible salt—and that, too, in an incidental allusion—such an accident would not warrant the surly and snarling attack of your correspondent, who signs himself, by way of advertisement, "A. Gillet, surgeon, Haymarket." It argues, Sir, a weak and bad cause, when the assailant (as, in the case of Dr. Ritterbrandt's *fidus Achates*, who comes to the rescue) loses temper, forgets the courtesy due from one gentleman to another, and indulges in virulent invective or personal scurrility. I cannot compliment you, Sir, on the insertion of this abusive missive—the repetition of a similar epistle will certainly dissever my communications in future from your pages. Numerous kindly-expressed sentiments have proved to me, that these have been much esteemed and highly (perhaps, too highly) appreciated. They have entailed upon me some expense, and no little trouble, in private correspondence: there is, therefore, no necessity for me to incur, in addition, the "the strife of little tongues." I am willing "to spend and be spent" in the public service: I wish to live for the benefit of that public. I have not lived for myself, but for others; and my pecuniary sacrifices in that cause amount to a high figure. For several of the inventions which the public now enjoy, I might have obtained "patents;" but I have left them *patent* to that public. You have compelled me, reluctantly, Sir, so to vindicate myself.

Portland-place, Hull, Nov. 19. ——— J. Murray, Ph. D.

PARSEY'S COMPRESSED AIR-ENGINE.

Sir,—Can any of your correspondents give me some information respecting Parsey's compressed air-engine? Having heard nothing about it for a long time, I am fearful it has proved a failure; I have reason to suppose that the air could be compressed in the reservoirs, by the explosion of gunpowder or gun cotton, more economically than by any other mode, and shall communicate my views on receiving any particulars of Mr. Parsey's invention.—A Subscriber: *Plympton, Devon, Nov.* 12.

THE MONMOUTHSHIRE AND GLAMORGANSHIRE BANKING COMPANY, AND THE VICTORIA IRON-WORKS.

Sir,—I find, by your last valuable Journal, that the attention of the shareholders has at length been aroused to the perilous position in which our bank is placed, by the carrying on of the Victoria Iron-Works, coupled with its general bad management. Like a "Too Large Shareholder," I have been at some trouble to investigate the correctness, or otherwise, of the statements put forth by "Looker On;" and fear, from all the information I can gain, that we shall find them too true. It is not for me to inquire who "Looker On" may be. I have nothing to do with personalities; but when I find, time after time, letters in your Journal, written by one who evidently has a thorough knowledge of the subject—containing simply statements of facts, and calculations, which appear, from the silence of our directors, to be incontrovertible—I must, indeed, be blind to my own interest, as a shareholder, to pass them over in silence. By a "Looker On's" last letter, I regret to find that he has taken leave of the subject. Allow me, through the medium of your columns, to entreat him at once to resume his pen. A large body of the shareholders are beginning to arouse themselves, and wish for more information. We beg "Looker On" to furnish us with additional matter, relative to the conduct of our directors, which we feel assured, from his former letters, he is well able to give; and I pledge myself, at our next half-yearly meeting, to raise such a dust about the ears of our directory, as will not be allayed by anything short of a full statement of our affairs. Many thanks for the publicity afforded by your columns to these truly "dark doings."

Pontypool, Nov. 3. Another too large Shareholder.

THE "GREAT BRITAIN"—SUGGESTION FOR HER REMOVAL.

Sir,—I have sent to Lloyds' the undermentioned plan for getting this steamer afloat; and, having been politely referred by the secretary to the underwriters at Glasgow and Liverpool, have also transmitted the same to them:—First, stop up the drilled holes, and close the plates at low water; then lay large pieces of timber along the ground fore and aft, on each side, staying the sides and ends; erect, at an inclination of say 60°, more or less on each side, pieces of balk, about twice the height of the vessel, crossed or joined at top; twist a chain cable round her, and connect the same from amidships of deck, with tops of the inclined poles; connect all the tops of such poles together by a chain, to be connected with a steamer or anchored ship's capstan; Bramah presses or pumps to be used on each side, and on the bows in case of need, acting on and from blocks, as there will be no want of water for the forcers; the pumps to be at, say an angle of 45°; the feet or bases of the poles and pumps to be stayed and moved forward alternately, on the principle of my walking triangle, which was published in your Journal some time since. A ship's capstan for power might be erected or fixed on the beach near low water (but above high water!) mark, to draw the vessel down with these walking duangles or double legs—all of which would at high water swing the vessel together, and, at the same time, move her forward.—A. T. J. Martin: *Penzance, Nov.* 14.

SAFETY FUSE—SCHONBEIN'S GUN COTTON.

Sir,—In your reports of the late mining (Schönbein) experiments, you say, there was no smoke except from the safety fuse. The prevention of the formation of smoke in blasting in mines, is a very important desideratum; and it having been suggested to me, the other evening, that the Professor and his friends should now turn their attention to the construction of a fuse that will not smoke, I make no apology for troubling you with these remarks. It has to be considered, whether by any means the explosive cotton can be rendered capable of sufficiently slow combustion, in a fuse, to give the men time to escape; perhaps, if it was wire drawn, it would be less rapidly explosive; the fuses might be constructed partly of powder, or pastiles might be attached to the top. I merely throw out the suggestion, as, of course, after this, none of such plans could be patented.

Penzance, Nov. 16. A. T. J. Martin.

GUN COTTON.

Sir,—If the gun cotton be exploded in contact with blue litmus paper, it leaves a permanent *red* stain—sufficient evidence that an *acid* is one of the products of its combustion. This will readily account for the fouling of the gun barrel,—and proves how unsafe it is, in this case, as a substitute for gunpowder; for, by its repeated use, the fowling-piece would become so weakened as to be altogether perilous. It has, therefore, in my opinion, been, very properly, rejected by the Board of Ordnance. In reference to the accident, in the case of the gun bursting in the hands of Mr. Lancaster, it should have been stated that the charge was increased from 50 to 83 grains—I wrote from memory. In an article, quoted in the *Times*, it is stated that the gun cotton, when held in the hand before the fire, explodes—also, when introduced *a yard* above a gas flame! I find it also explodes readily when placed on minutely-perforated card-board, and held above the flame of a spirit lamp. I have some gun cotton which has been submitted a *second* time to the process, and is much more powerfully explosive than the other. Now, this very uncertain and equivocal character forms a special element in its very questionable safety, in reference to gunnery. Under proper circumstances, it seems well adapted for blasting rocks, and has been so applied, both in this country and on the continent. Its safe transmission by post, I repeat, is more than questionable. It explodes by percussion, and the act of stamping the letters may effect this, and has done so, in the case of fulminating mercury. Other fibrous materials may be, by a similar process, converted into explosive compounds, more or less definite; and the fact will explain several phenomena, previously of difficult solution. A chemical friend informed me, he encountered an explosion in the preparation of *carbo-azotic acid*, in which process nitric acid and vegetable matter are employed—and I remember, in the case of several bottles of strong nitrous acid, packed in straw, and sent me from Glasgow, that, on the voyage, a "spontaneous combustion" ensued, on shipboard, from the action of a small portion that had accidentally leaked on the straw used in packing. It was providentially immediately under the hatchway, and the flames were soon got under.—J. Murray.

Portland-place, Hull, Nov. 18.

Schonbein's Gun-Cotton.—Prof. Schönbein, in a letter to the *Times*, dated Bâle, Nov. 13, says—"Some chymists have declared my gun-cotton to be Braconnot's and Pelouze's Xyloïdine, and it was only the other day that the same opinion was expressed in the French Academy. I have more than one reason to deny the correctness of that assertion, and the statement of a very simple fact will be sufficient to bear me out in what I say. Pelouze's Xyloïdine is, according to the (own) statements of that distinguished chymist, readily soluble in acetic acid, forming, with the latter, a sort of varnish. The same acid has not the slightest action upon the gun-cotton, however long, and at what temperature soever, both substances are kept in contact with one another. The gun-cotton exhibits its full weight and explosive force after having been treated with that acid for hours. There are, besides, other differences between my cotton and Pelouze's Xyloïdine, which will be made known in their proper time."

On the 9th, at Konigsberg, 6 ozs. of explosive cotton having become heated to 60° centrigade (140 Fahrenheit), spontaneously exploded in the laboratory of Dr. Keitch, and blew out the whole of the window-frame and glass.

More "Gun-Cotton" Experiments.—On Saturday last Mr. R. Oxland (chemist), of Plymouth, made some further experiments with this newly-discovered combustible, in the presence of the Earl of Morley, Messrs. G. W. Soltau, T. Carew, W. Bryant, E. James, M. Collier, J. W. Sparrow, B. Sparrow, J. D. Freeman, Capt. Monday, Lieut. Hyne, and a number of other gentlemen, with whose names we were unacquainted. The experiments were again made in the Catte Down Quarries, at Deadman's Bay, and were on a more extensive scale than those described a fortnight since. The Earl of Morley took a lively interest in the proceedings, and made notes of all the experiments, which was also done by several other gentlemen. The first trials were on two detached blocks of stone, in one of which was used gunpowder, and in the other cotton. The latter was a massive block weighing about 10 tons, and the hole was bored in about the centre of it. The hole was 15 inches in depth, and 1¼ inch bore; into this was placed 1½ oz. of cotton. The other stone was 5 tons weight, and into that was placed 3 ozs. of powder—the bore being about 10 inches deep. When the holes were properly tamped, the fuse was fired; and in a very short time the cotton and powder exploded, both doing their work effectually. The smaller stone was shattered by the powder, but the cotton did its work more completely. We counted 13 large pieces of stone which were thrown on all sides by the cotton—while many of the larger masses were split so as to make them easily workable. The experiment was looked upon as very satisfactory. The stone broken by the powder was thrown up to the height of the top of the quarries—the other stone was merely rent assunder by the explosion. From thence we walked to another part of the quarry workings, where a hole had been made in the face of the rock; this hole was 4 ft. deep, and the quantity of powder that would be employed to disturb the mass would be 2½ lbs. Into the hole 7 ozs. of cotton were placed and fired; and in a few minutes there was seen a slight heaving with a sudden burst, but with little noise, compared with the explosions produced by the gunpowder, and on walking up to the rock, we found that about 20 tons—an enormous mass—of hard and compact solid limestone had been so effectually severed, that you might place your hand in between wide fissures that had been made. The hole was a slanting one, made with the view of causing a disturbance rather than the heaving out of the rock; and the portion displaced was about 12 ft. broad and 7 ft. deep. The quarrymen looked at the affair with astonishment.—*Plymouth Jour.*

Transfer of Shares.—A correspondent offers the following suggestions, as a simple and practicable remedy for the risks attending transfers of shares in Joint-Stock Companies:—"That the buying broker should deliver, at the proper period, to the selling broker the transfer deed—*signed by the transferee*, as accepting the purchase. When the selling broker has obtained to it the signature of *his* principal, he should be entitled, on returning it to the buyer's broker, to receive the purchase money; and the latter shall be bound, by a rule of the Stock Exchange, in all cases to deposit the deed, without delay, in the hands of the secretary or other appointed officer of that establishment, to be by *him* forwarded to the office of the company for registration. There may be objections to this plan, which do not occur to me; but it may nevertheless be instrumental to the removal of a serious evil, and great obstruction to business, many persons being now deterred from selling shares by the risk to which they are exposed in transferring them. The adoption of the plan would entail no additional trouble on any one, excepting on the officer of the Stock Exchange, whose duty it would be to keep a register of the transfers daily received from the brokers, and to send to the secretary of each joint-stock company, as occasion might require, a list of the conveyances forwarded to him for registration."

Glasgow Iron Trade.—Two large engines were started at the Glasgow Iron-Works, on Thursday week: every thing went off satisfactorily, and an entertainment was given to the men to celebrate the event.

The Cornish Miner.—The following little incident may be taken as one among the many proofs of the proper feelings by which the Cornish miners, as a class, may be said to be characterised. Monday week, the Monday following setting day, at the Consolidated Mines, being a holiday there, the miners voluntarily agreed to devote it to making search for the body of their esteemed neighbour, Mr. Skinner. Their exertions, which proved unsuccessful, were chiefly directed to draining the Wheal Cupid engine-shaft.

Pottery Materials.—At the present day the finer materials required for pottery purposes are brought from considerable distances. The flint is from Gravesend and North-fleet, 650 miles; various clays and stones from Cornwall, Devon, and Dorset, varying from 300 to 460 miles. These distances are reckoned by water carriage to Liverpool, from which place the materials are conveyed to the Potteries by canal, thus adding another 50 miles! The chertstone, for the grinding-mills, is from Wales. Gypsum, which yields the plaster of Paris, of which the moulds are made, is from Derbyshire. The cost of transit is heavy: for instance, the clay, which in Cornwall sells at 18s. per ton, costs in the Potteries from 36s. to 38s. China clay—in Cornwall, 27s. per ton; Potteries, 43s. 6d. Devon and Dorset blue clay—in Cornwall, 18s. per ton; Potteries, 36s.; black ditto—Cornwall, 12s.; Potteries, 27s. per ton.—*Art Union*,

MANUFACTURE OF PLATE GLASS IN ENGLAND.

Perhaps there is no one article, the produce of the manufactures of the isles of Great Britain, in which there has been, for the last 30 years, so much room for the investment of capital, in competition with those who held the trade in their own hands, as that of plate glass. The statistics of this manufacture show some most extraordinary features—always having a demand far beyond the powers of the makers to supply, enormous profits have been made; and it is a well-known fact, that one house in 1845 the year of the total repeal of the duty, made in twelve months a profit of 30,000*l.* on a paid-up capital of 125,000*l.*, or very nearly 25 per cent. per annum. Notwithstanding the increasing supply annually, since 1819, the demand has increased in a greater ratio; in that year, the manufacture was 3000 superficial feet per week, of indifferent quality, with no complaint as to supply; in 1827, it was 5000 feet, considerably improved, but inadequate to the demand; in 1836, it was 7000 feet, improved, but still insufficient; and in 1844, it had risen to 23,000 feet per week, still improving in quality, but the supply more inadequate than ever; in 1819, the average price for all sizes was from 20s. to 25s. per foot, and is now from 5s. to 6s. per foot. Large plates—say, 144 inches by 75 inches—could not be manufactured until about the year 1836; they are now made with facility, and sold at 35s. 7d. per foot—while French plates, made at St. Gobain, free of duty, cannot be obtained of that size under 67s. 11d. per foot. There are still only 7 houses engaged in this manufacture, the sales average 45,000 feet per week; and the demand is so on the increase, that the works are kept in constant operation, some of them day and night. The duty remitted in 1845, amounted to about 40 per cent. on the cost price—while such reduction has only benefitted the consumer to the extent of 15 per cent.; and even at these enormously increased profits, as we have before stated, the demand far exceeds the supply. With these facts before us, it gives us great pleasure to observe, that a highly-respectable company is formed, under the title of The Albion Plate Glass Company, for establishing extensive works in the vicinity of London, where the most peculiar advantages are afforded. The Thames' sand, of which many thousand tons are used annually for grinding, is not only of excellent quality, but the expense is about half that at which an inferior description is obtained in other places; many other advantages exist, which will counterbalance the additional cost of coal: moreover, the Thames' water, as it does not flow over a *mineral* bed, possesses properties peculiarly favourable for the manufacture of plate glass of superior quality; and it is a well-known fact, that, notwithstanding the former duty, and all the restrictions and vexatious interference, inseparable from the Excise laws, England succeeded in producing plate glass not only equal, but superior, to that of any other country in Europe; and, with the unrestricted command of the materials which this country affords—*alkali* and *coal*—it is more than probable that we shall shortly supply the world. There can be no reason to doubt the profitable results which would ensue from almost any amount of capital invested in this branch of manufacture; it is, however, intended to commence with a make of, perhaps, 5000 feet per week, which may be gradually increased to any amount which may become necessary. There is little doubt as to the advantages to be derived by the shareholders in such an undertaking; one-half of the capital, which is 100,000*l.*, is already subscribed by highly-respectable parties, and it is intended to apportion the remaining capital to responsible persons only, to enable the directors to carry out the company's objects immediately, and with the best results. For further particulars, we refer to our advertising columns. Some comparison of data of the statistics of plate glass manufacture, between 1827 and 1846, showing the improvements made, will be interesting. In 1827, coals were equal to 30s. per ton in London; they are now delivered at some works near that port at 13s. per ton. An annealing kiln contained 200 feet of glass, and took 14 to 21 days; it now contains 400 feet, and is finished in five days. A casting furnace contained 1200 feet per week, and *pots* 12 cwts. each; one now contains 4000 feet per week, and *pots* 20 cwts. each; pearl ashes were then 43*l.* per ton—they are now 23*l.* per ton; the casting table was heated at the top by charcoal, at a cost of 500*l.* per annum—it is now heated underneath by cinders, and costs scarcely anything. An engine, of 32-horse power, ground and polished, 12 hours to the day, 800 feet to 1000 feet per week; a 60-horse engine will grind and polish 3000 feet to 4000 feet *better*. A grinding-bench ground 250 feet per week—it does now better and cheaper, from 600 feet to 700 feet per week. A polishing-bench polished 250 feet per week—it now does 500 feet per week; and one could be constructed to polish better and cheaper nearly 1000 feet per week. One establishment in London made 60,000 feet per annum—one now does 400,000 feet, unable to supply orders, and no room to extend. The price of rough and moulded plate then averaged from 5s. to 6s. per foot—it now averages 1s. 6d. to 2s.—and one order for 43,000 feet has been given. Wages, though low in 1827, made the average per foot 10s.; in 1846, wages, though comparatively high, fall less heavy on the article produced, which only average 3s. per foot. With these data from public records before them, we think capitalists may with safety venture in such an undertaking;—and, especially considering that the name of Howard, which, for the last 30 years, has been distinguished in the manufacture of *superior* glass, affords one of the surest guarantees of success.

Hemp and Flax Manufacturing Company.—Some years since Mr. Donlan, an extensive manufacturer, obtained a patent for improved processes in the manufacture of hemp, flax, and other fibrillated substances, the produce of the European continent, as well as the colonies, Irish, and other home-grown materials, and so remarkable were the productions for superiority in texture, fineness, and durability, that a company was established at Rugeley, in Staffordshire, which has since, with Mr. Donlan at the head of the factory, carried on business with the most complete success. We understand that so extensive are the orders, that it is now proposed to establish it on a larger basis, and to raise a capital of 225,000*l.*, in 18,000 shares, of 12*l.* 10s. each. The names of the provisional committee are among the very *elite* of society, and there can be little doubt of its becoming an important and profitable undertaking.

Walkden Moor Collieries.—Walkden Moor consists of a straggling hamlet of about 150 or 200 cottages, through which passes the broad and well-paven road from Manchester to West Houghton, Wigan, and Chorley. The deepest shaft at present is 154 yards, but one is in the course of sinking which will be 200 yards in depth. The seams vary from 20 in. to 7 ft. in thickness; the men work according to the demand, which, of course, varies; but the average duration of their labour will be from six to eight hours per day; they are paid according to the quantity they get, and their earnings will average from 18s. to 20s. weekly, out of which they find their own candles and tools. There are about 1300 men and boys employed in the collieries on various parts of the property of the Earl of Ellesmere; they are paid fortnightly, on the Wednesday. The place of payment is at a short distance from the works I have been describing. In the midst of a large space of about 60 acres, which his lordship has had laid out as a place of recreation, stands a kind of quaintly ornamented cottage; and this, besides being a reading-room, for such as choose to resort to it, is also the place where the wages are paid. The mode in which the claims of these 1300 hands are disposed of, is worthy of imitation by some other large employers. The earnings of every hand during the past fortnight having been ascertained from the books, his wages are counted, and placed in a compartment containing a number corresponding with the number of a ticket which he holds. On his entrance into the room, he advances to the table, and, exhibiting his ticket, the money which stands on his number is given to him, and he walks out of the place without a moment being lost, or a word being spoken. The business is thus disposed of with quickness and ease; and the men, instead of being decoyed to the ale-house, and tempted to spend their earnings, are paid at a distance from such places, and are encouraged to carry their wages entire to their families. There are no beer-houses or hush-shops on the property; there is but very little betting or gambling carried on; no "ledger sweeps," nor cock-fightings. Occasionally the men get up a foot-race or two; and then, as might be expected, the usual love of hazard is exhibited in wagers amongst themselves, but of trifling amount.

Discovery of Iron in the Apennines.—A lode of iron, of an excellent quality, has been discovered in the Apennines, situated in the Roman States, which is expected to yield at least 60 per cent. in working; whilst the iron beds of the Island of Elba, so celebrated, do not give more than 50 per cent. The extracting of the ore, which is already progressing, even surpasses all expectation. The firm of Frerejean, of Vienne, in Dauphiné, and other monied parties in France, have offered to undertake the ultimate working of the mines, which has not yet been accepted.

Mining Correspondence.

ENGLISH MINES.

BARRISTOWN.—The lode in the 24 fm. level end, west of engine-shaft, although much larger, is still producing little lead; from recent dialling, I imagine this to be a part of the middle lode; I have set the men to drive south, to prove it. The lode in the 18 fm. level end, west of flat-rod shaft, is producing 1½ ton per fm.; the lode in the 18 fm. level end, east of flat-rod shaft, has improved during the last week; it now produces 1 ton per fm.; the lode in this end is taking a great underlay, notwithstanding the gradual improvement since it lost the slide. The lode in the 12 fm. level end, west of flat-rod shaft, is producing 1 ton per fm.; we have communicated the western winze from the 12 to the 18 fm. level, which will ventilate and enable us to work more extensively at this point; adit end east without much alteration; Clon Mines also without any change.—T. Angove: Nov. 13.

BEDFORD UNITED.—At Wheal Marquis, the lode in the 80 fm. level east is 2 ft. wide, producing good saving work—altogether improved since my last. In the 70 fm. level east the lode is 2½ ft. wide, composed of mundic, spar, and ore—saving work; the lode in Crew's winze, in the level, is 2 ft. wide, and worth 10*l.* per fm.; and in Michell's winze the lode is 18 in. wide, and worth 8*l.* per fm. At Wheal Tavistock, the lode in the 47 fm. level east is 2 ft. wide, producing some saving work; and in the level west the lode is 2 ft. wide, composed of spar, mundic, and ore, saving work—altogether very promising. In the 35 fm. level east there is no alteration. The lode in the south engine-shaft continues about 6 ft. wide, producing good stones of ore in places. In the adit level the lode is 18 in. wide, composed of gossan and spar.—J. Phillips: Nov. 17.

CALLINGTON.—We are now engaged fixing a plunger lift at the 100 fm. level, North Mine; at this level, both north and south, the lode is producing silver-lead ores. In the 90 fm. level south we have the copper lode; it is not yet cut through—much water is issuing from the same; in the north end the lode is producing silver-lead ores. In the 80 fm. level, driving north, we are opening good tribute ground; in the south end the lode is intermixed with silver-lead ores. In the 125 fm. level, cross-cutting from Johnson's shaft, the ground is hard. In the 112 fm. level, driving north, the lode has not been taken down; in driving west, we do not find Johnson's lode so promising as it was just at the intersection of the silver-lead ore lode; the men are now driving south. In the 100 fm. level north the lode is small, producing good work; the back will set at a moderate tribute. In the 90 fm. level, both north and south, the lode is producing silver-lead ores. In the 80 fm. level the lode has not been taken down.—J. T. Phillips: Nov. 16.

COOK'S KITCHEN.—At Chapple's lode, in sinking the engine-shaft under the 180 fm. level, the lode is large, and produces good stones of tin; in the 180 fm. level west, the part of the lode which we are driving on is worth 8*l.* per fm. In the winze, sinking under the 170 fm. level, the ground is harder,—and we, consequently, shall not be able to hole to the 180 fm. level quite so soon as was mentioned in the last report; in the 170 fm. level west the part of the lode which we are carrying is worth about 12*l.* per fm.; in the winze, sinking under the 160 fm. level, the lode is worth about 13*l.* per fm. We have suspended the driving of the 148 fm. level west, for the purpose of sinking a winze on the 160 fm. level, and laying open tin ground, for working on tribute; the 148 fm. level east is not within about 4 fms. of the new east shaft. The new east shaft is sinking below the 140 fm. level. In the 80 fm. level east, on North Tincroft lode, the lode is poor. The 92 fm. level west, on Eudy's lode, is not looking quite so well as when last reported. The quantity of tin sent to the smelting-house, on Friday last, was not equal to what I anticipated, owing to the work coming from our principal tin ground proving to be not so rich as it used to be, and consequently yielding less tin. We sent away 20 tons 3 cwts. 2 qrs. 24 lbs., realising 1058*l.* 16s. 10d., which, together with the sale of copper ore, will not fall far short of the amount of money of our usual monthly sale. One very important reason of our being short of the usual quantity of tin, was our having had occasion, during the past month, to take down and rebuild the stand of one of the fly-wheels of the steam stamps, which hindered us about a week. You will perceive, by the settling paper, that we have set the working of all the steam whims, at a certain price for 100 sacks; and the amount of work done will be ascertained by the same measurement of the tinstuff, as that by which the tributers are paid. The takers have to provide their own fuel, grease, oil, hemp, and everything else that may be necessary. We have not yet received any tender for the working of the steam stamps.—J. Vivian: Nov. 16.

CUBERT SILVER-LEAD.—The ground in the engine-shaft, during this week, has become a little more favourable for sinking. In the 25 fm. level the great lode going west is 3 ft. wide, rather of a hard nature, spar, with mundic and spots of lead; Trebiskin lode, at this level, driving east and west, is getting larger than it has been for some fathoms past; in each end the lode will average about 1 ft. wide, composed of spar, mundic, and ore, but not rich for the latter. At the 15 fm. level east, within the last fathom driving, the lode is much improved, being now 18 in. wide, and pretty good saving work; the western end here is yielding moderate work; lode about 10 in. wide. The tribute department, on the whole, is looking favourable, and the tributers are working well.—R. Rowe: Nov. 14.

EAST CROWNDALE.—The 90 fm. level east still continues poor; the lode is 15 in. wide, composed of flookan and white iron, on the north side; spar, mundic, and good spots of copper ore at times, on the south side; in the east end stopes there is still a tolerable good lode; in eastern end of the winze the lode is 20 in. wide, composed of flookan, spar, capel, iron, and good work for copper ore; in the western end, the lode is 15 in. wide, composed of spar, iron, flookan, capel, mundic, and a branch of copper ore 3 in. wide. The 20 fm. level, on the south branches, seems to be in rather a disordered state at present; we have broken some good work here in the past week, and the lode still contains good stones of ore, is 15 in. wide, composed of capel, spar, and good stones of copper ore, and mundic. The ground in the new engine-shaft, and also in Oxpark shaft is pretty much the same as last week.—S. Sprague; S. Paull: Nov. 14.

EAST TAMAR CONSOLS.—At Whitson, Hitchins's engine-shaft is sunk 4 ft. below the 54 fm. level. In the 54 fm. levels, north and south, the lode is 2 ft. wide, good stones of ore. In the 46 fm. level south the lode is 18 in. wide, saving work. At Furzehill, Harrison's shaft is worked 6 ft. below the 38 fm. level; lode 2 ft. wide, good stones of silver-lead ore; we have suspended the shaft for the present, the shaftmen being engaged in cutting a plat for putting in the tramroad. In the 38 fm. level south the lode is 2 ft. wide, fluor-spar, and good stones of lead. In the 30 fm. level south the lode is 2 ft. wide, work of a promising character. We have sampled, on Wednesday last, 41 tons of silver-lead ores.—B. Robins: Nov. 17.

GREAT MICHELL CONSOLS.—I beg to acquaint you, that we have completed the necessary pitwork, &c., to the 22 fm. level, and have this day resumed sinking the engine-shaft. We are preparing floors for dressing the ore, and hope to have a parcel for the market in about a month from the above date. The 22 fm. level, east of the shaft, continues to look well, composed chiefly of gossan, with stones of ore in places; in this level west the lode is 4 ft. wide, principally very fine gossan, with some spar, and spots of rich copper ore—very promising.—T. Richards: Nov. 17.

GUNNIS LAKE.—I beg to inform you, that the lode in Bailey's engine-shaft is 3 ft. wide, producing good stones of ore in places—a strong kindly lode. There has been no lode taken down in the 12 fm. levels east and west since last reported.—W. Richards: Nov. 17.

HAWKMOOR.—I beg to inform you, that the lode in the 15 fm. level, east of Hitchins's shaft, continues about 20 in. wide, producing stones of ore occasionally.—P. Richards: Nov. 17.

HOLMBUSH.—The shaftmen are getting on with their bargain as favourable as we anticipated. The lode in the 120 fm. level, west of the great cross-course, is 14 in. wide, and worth 18*l.* per fm.; in the same level, driving east of Hitchins's shaft, the lode is 10 in. wide, composed of mundic and stones of ore; in the 120 fm. level, west of the winze (on the north part), the lode is 1 ft. wide, and worth 7*l.* per fm.; we shall hasten on this level, to effect the communication with the eastern end, that the water may be conveyed back to the engine at this level, instead of being drawn up to the 110 fm. level by manual labour, as at present; after this is effected, we shall begin to sink a winze below the 120 fm. level, on the north part, about 20 fms. further east than where the shaft will be sunk. The lode in the rise above the 110 fm. level (on the north part) is much the same as last reported on; we are expecting to make the communication to the winze sunk below the 100; in driving the 110 fm. level south, we have intersected the copper lode; it is 1 ft. wide, and worth 6*l.* per fm.; we shall at once commence driving east, to intersect the main part of the lead lode—the level being driven on the flookan part. The lode in the winze, sinking below the 110 fm. level, is 1 ft. wide, and worth 8*l.* per fm. In the 100 fm. level south the lead lode is 3 ft. wide, composed of spar, flookan, and occasionally stones of lead; the lead pitches in the back of this lode are much the same as last reported on.—W. Lean: Nov. 17.

LAMERHOOE WHEAL MARIA.—The I lode opened upon, which is a continuation of the Benny lode, worked on the Cornish side the Tamar, has much improved, and is now 4 to 5 ft. big; stones from the lode shall be forwarded: this is highly encouraging, as proving the value of our sett at a shallow level in one of the several lodes. The engine and whim shafts are going down, and every economy observed, and attention paid to the directions of the committee.—J. Tabb: Nov. 18.

LEWIS.—The lode in the 60 fm. level end, east of Wheal Nutt engine-shaft, is 18 in. wide, and worth 50s. per fm. for tin; the lode in the 60 west is 2½ ft. wide, and worth 40s. per fm. for tin. The lode in the 50 fm. level end east is 3 ft. wide, and worth 50*l.* per fm. for tin; we are continuing to drive the cross-cut south at the 50, west of engine-shaft—ground harder than usual. The lode in the 40 fm. level end east is 2 ft. wide, and worth 8*l.* per fm. for tin; the lode in the 40 end west, on the south branch, is 9 in. wide—set at 10s. per fm. and 10s. tribute. The lode in the 30 fm. level end east is at present small, and disordered; the lode in the 30 end west, on the south branch, is 10 in. wide—set at 10s. in 1*l.* for saving the tin; the back and bottom of this level are now being worked at an average tribute of 11s. We are also extending the cross-cut north, at the 20 fm. level, from the copper ore shaft—ground favourable. The lode in the 20 fm. level end west, on Scadden's branch, is 6 in. wide, set at 20s. per fm., and 10s. in 1*l.* for saving the copper ore; we have also sunk a winze below the 20 fm. level, in Scadden's branch, 5 fms., 4 fms. 1 ft. of which the lode had a very promising appearance; the last 5 ft. we had a good branch of yellow copper on opening ground that would work at 5s. tribute; the water has so much increased in this winze, that we are obliged to suspend it, and put the men to drive a cross-cut at the 40 fm. level, in order to intersect the same lode. The lode in Bush shaft, sinking under the adit level, is 1 ft. wide, producing some tin, and very kindly. We expect to work our stamping machine at or about the end of this month.—S. S. Noell: Nov. 14.

LANIVET CONSOLS.—The 80 fm. level east is much as last reported, the men having been engaged in rising against the winze coming down from the 70, which is now holed; we have now proper ventilation in the 80 east, and shall set a new pitch in the back of that level in a few days; in the 80 fm. level west the leader part of the ore is 2½ ft. wide, producing but a small quantity of ore. We have not yet cut through the lode at the 40 fm. level. In the 30 fm. level east the lode is at present unproductive. We have for our sampling, on Monday next, 70 tons of ore.—H. Williams; W. Michell: Nov. 14.

MENDIP HILLS.—The appearance of the lode in Stainsby's shaft continues much the same, principally composed of quartz and flookan, with small cubes of lead intermixed at times; it is now about 5½ ft. wide; shaft down 4 fms. 4 ft. below the 38 fm. level—ground rather harder for sinking than it has been. We have, during the past week, broken several cwts. of lead from the stopes in the bottom of the 20 fm. level, north of Somers's shaft; but it is not so good at present as it has been.—F. C. Harpur: Nov 16.

PENTUAN WHEAL MARY.—I am happy to inform you, that, since my last report, the ground through which we are driving is greatly improved: we have cut several branches, all tending towards the lode, with strong indications of copper ore. I would strongly recommend to work in the valley as early as possible, as there could be large returns made in a short time, by virtue of water-power.—James Chynoweth: Nov. 18.

SILVER VALLEY.—The tin lode in the 40 fm. level east is now about 3½ ft. wide, and still increasing in size; it is at present poor, but has a very promising appearance; the slide underlaying south has carried or hove the lode in that direction about 15 in., but we cannot yet ascertain whether it has had any other effect on the same below this place; the winze sinking under this level is progressing satisfactorily, which will, no doubt, when communicated, greatly assist ventilation, and lay open tribute ground. The lode in the 30 fm. level west is 1 ft. 6 in. wide, containing some spots of tin; a slide has fallen in here, near the bottom of the level, underlaying south, which has intersected and hove the lode a little similar to that at the 40 fm. level. At the silver mine, in the past week, we have broken a little good work of sulphuret and native silver from the back of the 30 fm. level; the lode in the stopes is at present poor, but we may expect to meet with other deposits in the same sheet of silvery gound going eastward. In the 10 fm. level west, the south part of the lode is 18 in. wide, composed of flookan and carbonate of iron; this and the north part are still approaching each other; and, from its present appearance, we hope to find silver at the junction, which will be, if they continue their respective bearings, about 2 fms. further west; the lode in the eastern end is in three parts—the north branch has much improved in appearance since last report, being now 16 in. wide, with quartz, mundic, and flookan. At Wheal Sisters, the lode in the shallow adit east is 2 ft. wide, composed of mundic, flookan, and carbonate of iron; the mundic part, from assays, contains about 15 ozs. of silver to the ton.—S. Richards: Nov. 16.

SOUTH LYDFORD.—I was up at Lydford yesterday, and find the adit is in upwards of 10 fms., and in good ground, with several flat branches in the end, producing mundic and copper; at the surface there is a lode, about 5 fms. before the end, running east and west; and, if it underlays north, we shall soon cut it; but, if south, we may have several fathoms to drive. As these flat branches, apparently coming from the lode, are here producing spots of copper, I think there is a chance of finding a good lode when we cut it. There are also two (north and south) lodes just before us, or within 20 fms., in the present end, and it is hard if some of them do not make something.—J. Hambly: Nov. 12.

SOUTH WHEAL TRELAWNEY.—Sobey's lode, in the adit level south, is 2 feet wide, composed of gossan and flookan, with spots of lead scattered throughout the lode. There is more lead to be seen in the adit end at present than I ever saw in the lode at any one time before; the ground is still favourable for driving, and the lode is underlaying east 2 ft. in a fm., and the direction 17 degrees west of south; and on this point we have carried our line out, and fixed and sett the new engine-shaft, to sink and timber, by six men, at 30s. per fm. for 5 fms. extent—the same to be carried 10 ft. long, and 7 ft. wide, within the timber; and agreeable to the direction and underlie of the lode, it will intersect the lode 40 fms. below the adit level. We have named the shaft Snell's shaft.—W. Lean: Nov. 17.

STRAY PARK AND CAMBORNE VEAN.—The tutwork operations in these mines, during the month of October, are defined in the following comprehensive statement, showing the extent of work, the number of men employed in its performance, the amount per fm. given, with size and value of the lode:—Rising above the back of the 70 fm. level, on south lode, by 4 men, 2 fms., at 8*l.* per fm.—the lode 1 ft. wide, yielding 1 ton of ore to a fm.; rising in the back of the same level, by 4 men, 2 fms. 3 in., at 9*l.* per fm.—the lode 2 ft. wide, yielding 3 tons of ore to a fm.; driving the 70 fm. level west, on south lode, by 4 men, 2 fms. 1 ft., at 7*l.* 10s. per fm.—lode 6 in. wide, yielding stones of ore. Driving the 80 fm. level, on the south lode, by 4 men, 2 fms. 1 ft. 7 in., at 8*l.* 10s. per fm.—the lode 2 ft. wide, yielding 1 ton of ore to a fm. Driving the 90 fm. level, on the south lode, by 4 men, 2 fms. 1 ft. 7 in., at 8*l.* per fm.—the lode 1 ft. wide, yielding 2 tons of ore to a fm. Sinking a winze in the 90 fm. level, by 4 men, 1 fm. 5 ft., at 11*l.* per fm.—lode 2 ft. wide, yielding 2 tons of ore to a fm. Driving the 100 fm. level west, on the south lode, by 4 men, 1 fm. 4 ft. 4 in., at 11*l.* 10s. per fm.—lode 1 ft. wide, yielding ½ ton of ore to a fm.; sinking a winze in the 100 fm. level west, on the south lode, by 4 men, 2 fms. 9 in., at 9*l.* 10s. per fm.—lode 3 ft. wide, yielding 5 tons of ore to a fm. Driving the 110 fm. level west, on the south lode, by 4 men, 1 fm. 4 ft. 4 in., at 10*l.* per fm.—the lode 2 ft. wide, yielding 3 tons of ore to a fm. Driving the 120 fm. level west, on the south lode, by 4 men, 1 fm. 2 ft., at 11*l.* 10s. per fm.—lode 2 ft. wide, yielding 3½ tons tons to a fm. Driving the 124 fm. level, west on Stray Park old lode, by 4 men, 1 fm. 5 ft. 9 in., at 8*l.* 10s. per fm.—lode 1 ft. wide, yielding good stones of ore. Sinking winze in the 130 fm. level, on the south lode, by 4 men, 2 fms. 3 ft. 10 in., at 8*l.* 10s. per fm.—the lode 1 ft. wide, yielding 1 ton of ore to a fm. Driving the 150 fm. level west, on south lode, by 4 men, 5 ft. 1 in., at 8*l.* 10s. per fm.—lode 18 in. wide, yielding 1½ tons of ore to a fm.; driving the 150 fm. level east, on the south lode, by 4 men, 2 fms. 9 in., at 8*l.* per fm.—the lode 4 ft. wide, yielding 4 tons of ore to a fm. Driving the 180 fm. level east, on the south lode, by 6 men, 3 ft. 11 in., at 13*l.* per fm.—the lode 18 in. wide, yielding good stones of ore. The tribute ground is looking exceedingly well, and our sampling on Wednesday next (18th) will not fall much short of 550 tons. The pitwork is drawn up from Stray Park Mine, which, together with the engine, will be for sale, by public auction, sometime in the ensuing month.—Richard Eustice; Elisha Ralph: Nov. 16.—[By the above, we find that 62 men are employed on tutwork alone, who have, during the month of October, opened about 28 fms. of ore-ground, at a cost of 262*l.*—the same averaging 9*l.* 8s. per fm.]

TRELEIGH CONSOLS.—Christoe's shaft is sunk about 5 ft. below the 100 fm. level, in the country. In the 100 fm. level, east of ditto, the lode is about 2 ft. wide, rather more promising, but very little ore; in the 100 fm. level west of ditto, driving on a branch from 8 to 9 in. wide, no mineral. In Garden's shaft, below the 90, nothing sunk; the new plunger was completed today, and working; in the 90 fm. level, west of ditto, no lode taken down this week—the water being in a part of the time. In the 80, west of ditto, the lode is 20 in. wide, with stones of ore. In the winze, below the 70 west, the lode is 18 in. wide, with a little mineral. In the 70 fm. level, west of Good Fortune, the lode is 4 ft. wide, worth 10*l.* per fm. In the 60, west of Symons's, the lode is 20 in. wide, worth 5*l.* per fm. In the 50 fm. level, west on north lode, the lode is 15 in. wide, not so good as last week, producing stones of ore. In the 44 fm. level, west of Symons's, the lode is 15 in. wide, producing good stones of ore. The adit cross-cut is driving south towards the western shaft.—W. Symons: Nov. 14.

UNITED HILLS.—In the 90 fm. level, east of Williams's, lode 5 ft. wide course in quality, and worth 5*l.* per fm.; in the 90, west of Williams's, lode 3 feet wide, two feet good ore of average quality, worth 45*l.* per fm. In the 80, east of Williams's, lode 2½ ft. wide, one foot ore of average quality, and worth 9*l.* per fm.; in the 80, west of Williams's (north), the ground is a little harder than last reported. In the 70, east of eastern shaft, lode 3 ft. wide, 18 in. ore of average quality, worth 12*l.* per fm.; in the 70, west of James's (north), we have cut no lode as yet in this end, but are daily expecting to. In the stopes in the 90 fm. level, east of Williams's, lode 2 ft. wide, good ore, and worth 30*l.* per fm.; in ditto ditto, west of Williams's, lode 2½ ft. wide, 2 feet ore of good quality, worth 28*l.* per fm. In the eastern shaft, under the 70 fm. level, lode 4 feet wide, 18 in. on the north part good ore, and worth 20*l.* per fm. In the winze, under 60, west of Harper's winze, lode 3½ ft. wide, producing ore throughout, and worth 12*l.* per fm. In the shallow adit end east the lode is 3 ft. wide, producing but little ore, worth 3*l.* per fm. At Wheal Charles, in the 50, east of Gibson's shaft, the lode is 2 ft. wide, poor. In the 40, east of Gibson's shaft, rising, the lode is 3 ft. wide, orey throughout, and worth 25*l.* per fm. At Wheal Sparrow, in the 40, west of Tonkin's winze, the lode is 2 ft. wide, 1 ft. ore of average quality, and worth 6*l.* per fm. In Turner's shaft, under the 30 fm. level, the lode is 2½ ft. wide, orey throughout, and worth 12*l.* per fm. In the 30, west of Turner's shaft, the lode is 2½ ft. wide, unproductive at present.—Thomas Trevenen; Robert Williams.

VICTORIA (late Wheal Fortune Consols).—Pursuant to your directions, I have inspected your mines. The first object with me, was to discover the extent or limits of the sett, and which were pointed out to me by the agents. The situation of the mines and lodes is very favourable, being nearly west of the Beam Mines and the Rocks Mines, from which large quantities of tin have been obtained, and are now continuing to be raised. On the south is Mineral Courb Mine and the Alvigency Mines both of considerable promise, though the latter is at present suspended. On the west, there is a piece of untried ground (except some China Clay-Works) in which a good lode is discovered; and, if not one of yours, running parallel thereto. On the north, and partly in your sett, are the Wheal Fortune lodes, from which large quantities of tin have been raised. I next directed my attention to the openings on the lodes by the present company, and first observed the lode and caunter lode; and though I wish, as much as possible, to avoid using strong language, yet I cannot do justice to the present appearances without saying, few places that I have inspected (as far as the workings have been extended) present greater promise. The lode is about 3 ft. wide, and showed good tin work nearly all the way on which it is opened, being about 6 fms. long; this lode is the most southern one yet seen. Intersecting this about 4 fms. west is the caunter lode, on which very little has been done, but that little showed good tinstuff, about 2 ft. wide. We then examined the lode No. 1, and here the shaft was not clear, as the water and rubbish had fallen in. From this shaft, a rich parcel of tin had been sold. Portions of good work are lying about it, and the attle will pay a profit when your stamping mill is ready. As the character of this lode seemed less clear than the other, I got two samples well pulverized, and by the washing there of my doubts speedily vanished, as I found it a good sample of ore. I was told this lode was about 2½ ft. wide. I next saw No. 2 lode, which seems about 18 in. wide, not very rich. My next view was of a lode cut during the time I was there, to the north of all before described; and though only one pit was sunk thereon, yet a little tin was observable, the lode being full 3 ft. wide. In the lobby to the Wheal Pit there is another lode, discovered the day before, but I could not discern any tin of value. To the north, still further, are the Wheal Fortune lodes, from which good tin has been obtained, partly in this sett; and I have no doubt there are many other lodes within your sett, which the limited nature of your trials has not yet explored. I observed the strata in which the lodes are found very minutely, and consider it very congenial for the production of metals, it being a soft decomposed granite, and about a mile north of the killas, or slate, so that a speedy trial can be made. I examined the lobby to the Wheal Pit, and other preparations for the water-wheel, which are progressing favourably. I cannot omit one point connected with the profitable working of tin mines—the present and future prospects of the tin trade. This article now sells high, and is likely to do so for some time to come; and I should push all works to make returns at the earliest possible period. On the whole, I consider yours a very favourable sett; nevertheless, I must not conclude without saying, it will require steam power to develope its resources.—John Paull: Nov. 12.

— During the past week our men have been engaged in bringing up the lobby, and in making leats, &c., in which work we are progressing favourably. I put two men to open a lobby to intersect Best's lode, to ascertain its run, and I find it to be parallel to Nos. 1 and 2 lodes, the lode being from 3 to 4 ft. wide, yielding good stones of tin, and of very promising appearance; I have every reason to believe that it is equal to any of the other lodes previously discovered.—James Chynoweth Nov. 18.

WEST WHEAL JEWEL.—There is no lode taken down in either of the levels in the past week on Wheal Jewel lode. In the 12 fm. level, west of Quarry shaft, on Tolcarne tin lode, the lode is 1 ft. wide, worth 10*l.* per fm. In the winze, in the bottom of this level, the lode is worth 30*l.* per fm. In the winze, east of Quarry shaft, in the bottom of the same level, on Tolcarne tin lode, the lode is worth 16*l.* per fm. In the winze, west of Quarry shaft, in bottom of deep adit, on same lode, the lode is worth 20*l.* per fm. The winze, in the bottom of the deep adit, west of old sump shaft, is communicated to the 12 fm. level. We have set to drive west on the same lode at 3*l.* per fm., the lode is 9 in. wide, worth 3*l.* per fm.—R. Johns: Nov. 16.

WEST WHEAL MARIA.—I have to inform you, that we have resumed sinking the eastern whim-shaft; the lode in the shaft is 5 ft. wide, composed of mundic, spar, and rich stones of copper ore—a very promising looking lode indeed. We have dropped the lift in the engine-shaft 18 fms. below the adit, and the water is drained to the 12 fm. level. The shaftmen are employed in cutting down and securing the shaft, cutting bearer holes, and preparing to drop another lift. All our machinery is working admirably.—Thos. Rodda: Nov. 17.

WHEAL AGNES.—The shaft is sunk about 5 fms.; we expect to hole by the end of this week, which will ventilate the mine to drive the levels, &c. The pitch in the back of the adit level is just the same as last reported.—B. Robins: Nov. 17.

WHEAL ADAMS.—In the 50 fm. level, driving south, we are driving on the branches, with some good stones of lead in it, and a lot of the gossan-jack in it; we expect an improvement in this end every day, from the present appearances of it; in the 50 fm. level, driving south on the western silver-lead lode, we have a lode 4 ft. wide, with lead and the gossan-jack in it; this end will a little better than pay for driving itself, and leave good tribute ground that will work at 8s. in the 1*l.* tribute; in the rise, in the back of the 50, on the western silver-lead lode, we have a lode 4 ft. wide, with branch of lead on the footwall, 4 in. wide; the other parts of the lode are gossan-jack and spar; this will better than pay for itself, and leave tribute ground, that will work at 7s. in the 1*l.* for lead. The 40 fm. level, driving north, is not looking so well as it was last week; it is worth about 5*l.* per fm. for lead; the tribute pitch, in the back of the 40 fm. level, that is working at 2s. 6d. in the 1*l.*, is looking very well at present; we think that they are getting fair wages in their tribute. We sampled last month our lead ores, No. 1, computed 13 tons; No. 2, silver-lead ores, computed 20 tons, which I have sent the samples to all the eight smelters.—Thomas Moyle: Nov. 17.

WHEAL CONCORD.—The lode in the 38 west is now 2 ft. wide, killas spotted with mundic. In the rise above the 28 west, the lode is 4 ft. wide, decomposed slate and mundic, with particles of lead, and the ground very easy to break, so that considerable trial can be speedily made. The rise in the back of the same level, east from shaft, has been holed to the 20, but the ground will not set on tribute. We are raising a little lead from the old backs above the 28, and hope they will improve. The men have begun to explore the ground about the 20 fm. level east, and have some lead in sight; the cross-cut at this level, driving towards the south part of the lode, has nearly approached the point where we expect to find it; the ground is becoming a deeper blue, and more water issuing from the end, which indicates we are near the lode. The lode in the winze, sinking below the 10, is still good; but the progress in sinking is rather slow, in consequence of the water, and an accident to the timber, which will take three or four days to repair. The lode in the stopes, in the back of the 10, has very much failed during the past week; and by that means we are not raising so much ore as we were a week or two since. However, I trust, when we intersect the lode in the 20, and further explore the old workings, the mine will present a more favourable aspect, and you may depend these objects will be accomplished with all possible dispatch. The lode in the 10 fm. level east is much as when last reported. The pile of dressed lead is now computed 20 tons. The wheel-pit for the crusher is nearly complete, and we anticipate to put in the wheel in the coming week, and the other machinery immediately after. Some of the surface men shall be put to costean as soon as they can be spared from other work.—J. B. Clymo: Nov. 14.

WHEAL LOUISA.—The engine-shaft is down 19 fms.; the ground through which we are sinking is of a light blue colour, congenial for lead. Since my last report, we have cut several branches in the adit level, in the south part of the mine; one, in particular, is from 4 in. to 5 in. wide, spotted with copper ore; and, from the appearance of the branches, and the ground through which we are driving, a good lode may be expected near at hand.—J. Chynoweth.

FOREIGN MINES.

ANGLO-MEXICAN.—*Guanaxuato, Sept. 25.*—This mine has given us a fair profit this month, but it cannot continue; and what is more serious is, that in following the lode down on the underlie, we have opened for ourselves extensive reservoirs of water, which must be brought up from that extra depth by manual labour, so we must look forward to less profits, or even (I may say) some loss. It is not worth while to sink the present pit deeper, and cross-cut back to the lode neither can we, under present circumstances, put down an entire new shaft from the surface, without also denouncing new ground: nevertheless, we were bound to follow the clavo whilst it continued rich; and all our efforts must now be dedicated to avoid loss, until we meet with another bunch of good ore. Next week, I shall visit the mine, and minutely inspect it, and I will see also how the memorias are to be kept under.

Week ending	Memoria.	Sale.	Profit.
Aug. 22	$ 1138 7 9	$ 3872 4 0	$ 797 2 3
29	801 7 1	4342 3 0	1869 2 4
Sept. 5	927 4 3	4227 2 0	1185 0 9
12	1100 7 0	2315 7 0	57 0 7
19	1105 6 0	3746 4 0	767 4 0

Total cargas sold 1832, at the average price of $10 10 per carga. The price is considerable lower than that of the last month, and I fear the price must go down very considerably again.

Sirena is so poor, and the water gives so much, that I fear our tenant will soon think of giving us notice to terminate his agreement with the company. This will be most annoying under the circumstances, as we shall have to keep up the amparo ourselves; but we shall see probably before next packet. All we get from Sirena this month is rent $40 up to 12th inst.

Finance.—The inclosed statement shews an asset of $80,896 6 5, I am happy to say, that by the conducta, which leaves Guanaxuato to day, I remit the board $25,000, which I hope will reach Tampico in safety, and be put on board the British packet with as little delay as possible.

GREAT DEVON CONSOLS.—We are given to understand that a discovery has been made in the part of the sett known as the Anna Maria, named, if we mistake not, after the Duchess of Bedford. The lode has not yet been driven through but for 18 in., without a wall—it is of high produce; this is at a shallow depth; and if, as there is every reason to suppose, it holds in depth, while its width is at present undetermined, there can be no question but that this further discovery will materially enhance the value of the mine. We hope next week to be in a position to give more minute data, but up to the time of going to press no further information had been received. We are informed, that in the locality so much importance was attached to the discovery, that at Tavistock the church bells were set ringing—we are sorry to hear this, for, while we can rejoice in the prosperity of others, and the additional resources from whence labour may be employed, yet we think such a step is somewhat *outré*, and should, in future, be discouraged. The point at which this discovery has been made is 28 fms. from surface, and this holds out the most favourable expectations, from its being in steady or fixed ground, and not merely seen at surface.

VENTONGIMPS MINING COMPANY.—Mining adventures are daily gaining ground with the capitalist, who now feels not that hesitation of embarking in operations of that nature, which he experienced some 10 or 15 years since: thanks to the *Mining Journal*, for the publicity which it has given to improvident schemes, while it has upheld legitimate undertakings, whereby, we believe, more good has been derived by the county of Cornwall and the out-adventurers, than by any other course—however, opinions might have been entertained by our friends in the far west as to a contrary result. We know that we have helped many—we have saved the pockets of some—while, we believe, we have done injury to none. We have been induced to enter thus far on the subject, from the notice which appears in our columns of to-day, with reference to the progress of a company for working the Ventongimps Mines, in Cornwall. We are aware there is no especial novelty in the announcement; yet, perhaps, under the circumstances attendant, it may not be amiss to advert to its prospects and position. Their prospectus, which we have seen (referring generally to the lead mines of Cornwall) observes, that the amount invested may be taken, in the aggregate, at 245,000*l.*, while the market value is 515,000*l.*, or an increase of more than 100 per cent.; while it states that the increase in the importation of foreign lead is comparatively insignificant, amounting only to 2617 tons within the past four years—while, in America, the production from the lead mines had seriously decreased, at the same time that the quantity raised in this country is estimated at 60,000 tons. We may observe, that, in these remarks, we must be understood as following the prospectus, which proceeds to observe on the relative value of shares in the several mines in Cornwall—where it is shown that the value of East Wheal Rose shares, on which 70*l.* only is paid, have been sold at 1500*l.*; while, in the immediate locality, are Cubert Mine, 12*l.* paid, selling price 30*l.*; Calestock, selling at 50*l.* per cent. pm. on cost price; Perran Wheal Virgin, 40*l.*, with only 9*l.* paid; and others are cited in like manner. The sett belonging to the present shareholders formed, at one period, a portion of the property held by the late Cornubian Company—the lode taking a westerly direction, passing into the present sett. It appears that operations commenced in February, 1844; and, in the succeeding month, "an unusually promising lode, from 2 ft. to 3 ft. wide, had been intersected, composed of flookan and gossan, interspersed with silver-lead—large rich stones of lead being constantly found."—Vide *Mining Journal*, March 11, 1844. The works were, however, carried on without other machinery than a horse-whim—the shoot of lead enlarging as the workings proceeded deeper—the lowest level being the 18 fm. The engine at the Cornubian Mine, however, being idle, and the operations brought to a close, the influx of water was too great to admit of further prosecution of the mine—the lode at the time of the workings being suspended was worth 20*l.* per fm., and going down with good prospects. The present company, it appears, have purchased the engine (50-inch cylinder) of the Cornubian Company, which went to work about two months since; and the services of Capt. R. Rowe having been secured, the mine is now in course of being prosecuted with vigour. The proposed workings are depicted on a plan and section, and consist of sinking the new engine-shaft to the 30 fm. level; then to drive a cross-cut in the direction of the ore ground already discovered at the bottom of the 18 fm. level, where it is calulated there are at least 12 fms. of backs of rich ore ground, while other lodes may be intersected in the course of operations. A sum of nearly 3000*l.* has been expended in the purchase of machinery, and cost of working, during the past six months; and the mine having advanced to its present state, it is divided into 1000 shares, on which the sum of 3*l.* per share is now required. The calculations are based upon sinking to the 50 fm. level, and, to do this, about 2000*l.* more will be ultimately required; but, during the progress of this, ores raised may probably counterbalance, and even exceed, the expenditure. The directors and secretary rendering their services gratuitous; the accounts and reports of the mine being at all times open to access by the adventurers, and meetings held each alternate month; in a word, the adventure is conducted on the Cost-book Principle.

WHEAL BARBARA SILVER, LEAD, AND COPPER MINE.—Another new company has also been formed for the prosecution of the above mine, which is situated in the parish of St. Kew, and from the reports of several experienced miners, we are led to believe it likely to turn out a profitable speculation. An assays from samples taken from two lodes at very shallow depths, and assayed by Mr. R. Rodda, of St. Austell, gave 44 ozs. 12 dwts. of silver to the ton. It is proposed, that the mine be divided into 2560 shares—1280 to be held by the proprietors for their present outlay (but subject to future calls); and on the remainder, which are to be issued to the public, a deposit of 30s. is to be paid, which it is expected will be ample for erecting a suitable engine and machinery, and laying open the mine, which is in killas, held under a 21 years' lease, and at 1-14th dues. The following are some extracts from the agents' reports:—Capt. W. Bishop, of St. Minver, says—"I find an adit has been driven 37 fms. east, it has intersected the lode about 12 fms. from its commencement, and is afterwards driven on its course; about 22 fms. east, from the commencement of the adit, is a shaft sunk on the course of the lode, which intersects the adit 4 fms. from surface; the lode in this shaft, and the adit, has a very promising appearance; it runs east and west, and underlays south about 1½ ft. in a fm., varying in size from 1 to 3½ ft. wide, is composed of spar, mundic, blende, copper, and excellent stones of rich silver lead ore." Capt. J. Williams says—"The adit level has intersected two lodes of good size and appearance; these lodes, running east and west, and north-east and south-west, respectively, intersect near the present shaft. The former has been driven on eastward for some distance; and, by the present continuation, will soon be seen at a point beneath, where it is large and kindly at the surface. At present, the end has a promising appearance. The latter lode is also of a good size, but little driving has been made on it. At the adit level, only from 4 to 5 fms. deep, it has yielded lead and copper ore of good quality; and, the depth considered, more than ordinary quantities; this lode, as well as the former, should be driven on in both directions. The stratum is killas, of a mild quality, wherein great progress in driving can be made at a cheap rate. I strongly recommend a moderate steam power for prosecuting these lodes, as well as others, which there is every probability will be discovered in the sett. I have reason to infer that a good and valuable mine will thereby be obtained." Capt. J. Morcom, of Bodmin, says, in addition to corroborating the above—"I think that a 30 in. engine would be sufficient to work this mine, and believe, from the indications of so much mineral and mineral properties as these lodes contain, judging from similar appearances which I have seen in different parts of Cornwall, during 25 years' experience, that this mine is very likely to prove a great and prosperous concern with good management." Capt. W. H. F. Stephens also says—"The shaft is about 5 fms. deep; the back of the lode presents the most favourable appearances; this lode is composed of flookan, spar, jack, and beautiful stones of silver-lead ores. The other lode is what is termed a 'gossan' lode, and is first intersected about 22 fms. from the mouth of the adit. At this place, about 7 fms. east of the shaft, it is about 2½ ft. wide, running in a north-east and south-west direction, with an underlay of about 3 ft. in the fm.; it is composed of gossan, spar, jack, occasional stones of copper, and very fine stones of silver-lead." This adventure is in the neighbourhood of several valuable mines, particularly Great Treburget, which formerly produced immense quantities of rich silver-lead ores.

VICTORIA MINING COMPANY.—It will be perceived, by our advertising columns, that this company have allotted all the shares, and issued the letters of allotment; the adventure appears to be in high repute among those parties who know the property, and several gentlemen, totally unconnected with the promoters, who wished to take shares, but who, at the same time, were anxious to obtain a perfectly disinterested report, employed an agent, whom they believed would give a decidedly impartial one; and, from his experience, one on which they could rely. Capt. Paull's report will be found in another column, and is certainly of a most satisfactory nature—operations will, of course, be immediately carried out with spirit.

WHEAL CURTIS MINING COMPANY.—We understand the shares in this mine, which we have noticed on several occasions, are getting into considerable repute; that upwards of two-thirds of the number to be issued are taken; we are also informed, that the deposit on the greater portion are paid; and as no applications will be received after the 1st December, the remainder will, no doubt, be shortly allotted. One circumstance in favour of this undertaking is, that the mine is in operation to the greatest extent possible, until an engine is erected. The state of the mine is well known: at the time of its suspension, large quantities of ores had been raised even at the very shallow depths to which they had sunk; and that immediately on forking the water, it appears to be generally believed that still larger quantities will be in sight. We have before said, that there are six lodes known in the sett, and each believed, by those who have inspected them, to be equal to the one in the adjoining mine, which has raised 300,000*l.* worth of ore.

BRITISH IRON COMPANY.

The half-yearly meeting of this company was held at the offices, Threadneedle-street, on Friday, the 20th inst., and was attended by only a few proprietors. Sir GEORGE LARPENT, Bart, in the chair.

The circular and minutes or the last meeting having been read, the following report was submitted to the meeting:—

REPORT.

The present is the half-yearly meeting of the proprietors, held in pursuance of the deed of settlement and regulations of the company. A report of the receipts and payments in the half year, ending on the 30th June last, and the balance-sheet of that date, both signed by two of the auditors, are laid upon the table. When the call was made in February last, of 1*l.* per share, the directors stated that, in their judgment, the amount would enable them to discharge all the outstanding debts of the company. The directors have now the satisfaction of informing the proprietors, that the state of the concern at the present period fully corroborates the opinion then expressed. The directors and committee, with the assistance of the company's solicitor, are doing everything in their power to obtain such remaining sums due to the company as are recoverable, so that the whole of their concerns may be wound up.

The CHAIRMAN said, that when they made the last call of 1*l.* per share, the directors stated their belief, that it would discharge all the outstanding debts of the company; and he was happy to say, that experience had confirmed that opinion. It was now the object of the committee, assisted by their solicitor, to procure all they could for the company, by making those pay who were able to liquidate their engagements. He was happy to say, that they had incurred no expenses for management during the last half year. (Hear.) In keeping on the concern, their only object was to endeavour to obtain payment from those who were capable of paying their calls now overdue, or any part of them. The present meeting was only held because a half-yearly meeting was required by the deed.

A PROPRIETOR: I believe there was no list of the defaulters sent round to the proprietors, as promised.

The CHAIRMAN: On consultation with our solicitor, it was considered that the spirit and intention of the resolution would be best carried into effect, by sending a circular to all the proprietors, informing them that the list would lie at the office for their inspection at any time.

Mr. HICHENS said, he was the mover of the resolution alluded to, and he thought the directors were right in acting as they did respecting it. He thought the state of the concern was satisfactory, under the circumstances, and what he had looked forward to, from his knowledge of the directors. There were now, he understood, assets sufficient to meet all the debts and liabilities of the company; and, if anything remained, it would come to the shareholders. (Hear and laughter.)

Mr. M'LAURIN asked, what amount had been received?

The CHAIRMAN said, the balance-sheet was on the table for the inspection of the proprietors. The amount on the half year was 13,677*l.*

A PROPRIETOR: May we look forward to one or two meetings more?

The CHAIRMAN said, they had only a wish to get those parties to settle. If the compromise committee found they could not get in any more of the sums overdue on calls, they could summon a special meeting, and get rid of it altogether. He hoped, instead of anything to pay, the proprietors would have something to take. The concern was kept in existence to his own personal inconvenience, and he should be glad to get it closed altogether at the earliest practicable period, consistent with the interests of the proprietors. (Hear, hear.)

Mr. HICHENS then moved that the report be received, which was seconded by a PROPRIETOR, and passed unanimously.

The CHAIRMAN said, the business was then ended.

Mr. HICHENS observed, that he felt it his duty, before they separated, to propose a vote of thanks to their chairman, for his amiable conduct and urbanity at all times, which they had all experienced at the various meetings of this unfortunate company; and also to the other directors. (Hear.)

The motion was seconded by Mr. STEWART, and passed unanimously.

The meeting then adjourned.

RHYMNEY IRON COMPANY.

The annual general meeting was held on Wednesday, the 18th inst., at the offices, Laurence Pountney Hill, Cannon-street, to receive the report of the directors, and to take into consideration the present position and future prospects of the company: there was a very full attendance of influential shareholders.—Mr. WILSON (one of the directors) presided, and expressed his regret that the board of management did not conceive themselves warranted in recommending any dividend, for the past 12 months, on the subscribed capital. The fact appeared to be, that the expense of working the company's mines had been necessarily increased in a considerable degree by a rise, on three different occasions, of fully 10 per cent. in the price of labour. The miners and labourers, finding that the company had entered into large contracts for the supply of iron within a certain period, positively refused to continue operations at the mines unless their exorbitant demands were complied with.—The report detailed at some length the various matters in connection with the undertaking, which had taken place since their last meeting, and adverted to the combination of circumstances which had militated against its bearing a more remunerative aspect: after some discussion, the report was adopted.—Mr. ROUGEMONT brought under the consideration of the meeting a proposition for raising, at 5 per cent., by bonds of 8*l.* or 10*l.* each, a sum not exceeding 100,000*l.*, to pay off the mortgage of 40,000*l.* held by the Globe Insurance Company—40,000*l.* in loan notes, and some other outstanding liabilities.—Several proprietors considered the suggestion calculated, if acted upon, materially to benefit the company, and urged that a resolution, empowering the directors to take the necessary steps for raising the amount required, should be passed.—An animated conversation ensued, and ultimately a committee of proprietors was appointed, for the purpose of consulting with the directors on the expediency and practicability of the proposed plan—the result of their conjoint deliberations to be reported at a special general meeting of shareholders, for approval or rejection.—Thanks were voted to the chairman, and the meeting separated.

LOSTWITHIEL CONSOLS.—A meeting of adventurers was held at the offices of J. Crofts, Esq., 4, King-street, Cheapside, on the 19th inst.; when the draft lease from the Duchy of Cornwall for 20 years, from March 14, 1845, at 1-15th dues, was submitted. Mr. Crofts was appointed as secretary, and Mr. J. Offord as purser. A committee—consisting of Messrs. P. Davey (chairman), John Edwards, H. Smith, T. Ruston, J. J. Jerdein, and R. Offord—was appointed. It was resolved, that the mine be divided into 256, instead of 1024 shares, as originally proposed, such being in accordance with the terms of the lease; and further, that a general meeting of the adventurers be held on the 15th December next. A resolution was passed, that the mine be conducted on the Cost-book System.

PENBUGLE AND LANCARFFE CONSOLS.—A meeting of shareholders was held at Bodmin, on Tuesday, the 10th inst., when a further call was deemed necessary for the more perfect development of the mine. A call of 2*l.* 17s. 6d. per share, was made, payable by two instalments—1*l.* 10s., part thereof, on 20th November, and the remaining 1*l.* 7s. 6d. on or before the 24th December.—The following satisfactory report, from Capt. R. Rich, was then read to the meeting:—Since my report of the 17th of August last, a cross-cut has been driven at the 15 fm. level, reaching the lode at the distance of 6 fms. from the engine-shaft, and the lode has also been cut through and found to be 10 ft. wide, composed of mundic, prian, and spar, on course of which, north and south, 18 fms. have been driven—the appearance of lode throughout that distance being very promising, and highly indicative of minerals at a greater depth. I consider we have not yet seen the lode at this level in the most favourable locality, our engine-shaft being sunk in the centre of a point of rising ground betwixt two valleys, 28 fms. from either; the lodes at the surface in these valleys presenting a more favourable appearance than in the rising ground, under which we are now driving; therefore, I infer that the chances will be greater in our favour as we extend our levels into these valleys. In clearing the old adit, for the purpose of facilitating the escape of the surface water, some branches became apparent in the western side of the level; conceiving that these might lead to another lode, I put men to drive on them, and found, in driving 3 fms., a very kindly lode, 3 ft. wide, composed of gossan, mundic, and spar, underlying 1 ft. in a fm.; as far as I can judge of its direction, it will cross our main lode at the 15 fm. level, in about 6 fms. from our present end, 12 fms. north of the engine-shaft. The engine-shaft has been prosecuted with all possible expedition, and is now sunk 11 fms. below the 15 fm. level (38 fms. from the surface), through a stratum of blue killas, contorted and irregular. In sinking from the 15 fm. level, we have cut several kindly branches, some of them producing rich stones of lead, which, from their direction, may be expected to form a junction in the north valleys, with the lode recently discovered in the adit, in about 20 fms. from the shaft. Should the present favourable stratum continue in sinking the shaft, we shall cut the lode 30 fms. below the adit in about 6 weeks.

SOUTH WHEAL MARIA.—A meeting of shareholders was held at Gunnis Lake, on Thursday, the 12th inst.—G. C. Fox, Esq., in the chair.—This meeting was convened in consequence of a notice from the purser (Mr. Seccombe, of Tavistock), and arising out of a meeting of the managing committee, held on the 3d inst., when the following resolutions were passed:—"That the working of the mine be suspended, until a special general meeting be convened, to consider what is necessary to be done, for the economical and effectual working of the mine."—"That it be considered at the ensuing special general meeting, whether or not a proper feeling exists between the agents of this mine; if such feeling does not exist, then the committee recommend that proper agents be appointed." The purser, in calling this meeting, appended the following postscript to his notice:—"In consequence of the fracture of the upper balk of the dam, I request the attendance of all shareholders, to see the works, and judge for themselves. I have no doubt but many temporary plans may be adopted to raise the water 1 ft. higher, or let the dam remain the present height, and take up a foot stope in the front leat to work the winter; when, in the spring, the dam can be made quite secure by stone work, to answer every purpose intended for working our powerful and already erected machinery, to effectually prove the lodes in the said mine." From the especial solicitation of the purser, his gratuitous suggestions, and his well-known ability, as an engineer or surveyor, as well as the disclosures which were anticipated, a large body of shareholders attended the meeting. Soon after 2 P.M., the business of the day commenced; and, after every effort on the part of the purser and captain to criminate and recriminate each other in the eyes of the proprietors, the hour of 6 P.M. arrived, when the worthy chairman withdrew from the chair, stating the necessity of his leaving, declaring at the same time "that it was the first time he had taken the chair in South Maria, where he held so large an interest, but he assured them it would be the last." A general feeling of sympathy prevailed for the worthy chairman, by all but the chief actors in this extraordinary scene. The purser then informed the shareholders that the meeting was adjourned to Thursday, the 26th—no resolution having been proposed or submitted to the shareholders.—[It is a source of regret, that we are called upon, as a duty, to notice a meeting of this description; but we infer, from the information furnished us, that the purser is an individual on excellent terms with himself; but if the imputations brought against the agents be substantiated, it would be far better for them to resign their respective situations than await a dismissal. So seldom does it come within our province, to hear of such angry and personal insinuations, such stormy and disrespectful discussions, that we only notice them now, with the hope, that a similar representation may not again fall to our duty to remark on.]

TREVISKEY AND BARRIER.—At a meeting of adventurers, held at the mine, on the 16th inst., a dividend of 3*l.* per share was declared on Treviskey; and 2*l.* on Barrier. *Treviskey* account—Credits: ore sold 23d July (less lords' dues), 1168*l.* 1s. 10d.; materials, &c., 18*l.* 16s. 10d.: total, 1186*l.* 18s. 8d. The debits were—labour cost for Aug. and Sept., 347*l.* 9s. 7d.; tribute of ore, 207*l.* 19s. 11d.; merchants' bills, 110*l.* 4s. 10d.; Tresavean engine cost, 74*l.* 0s. 1d.: total, 739*l.* 14s. 5d.—showing a profit on the two months workings of 447*l.* 4s. 3d.; to which add balance of last account, and deduct the present dividend of 360*l.*—leaves the balance now in hand, 239*l.* 16s. 11d. The *Barrier* credits—ore sold 23d July (less dues), 500*l.* 17s.; materials, 2*l.* 5s.: total, 503*l.* 2s.—debits: cost for Aug. and Sept., and materials, &c., 233*l.* 15s. 5d.—showing a profit on the two months of 279*l.* 6s. 7d.; to which add balance of July, 66*l.* 11s. 7d., and deduct dividend of 240*l.*, now paid—shows present balance, 105*l.* 18s. 2d.—The report states the mines are greatly improved.

WEST WHEAL MARIA.—At a meeting of the adventurers, held on the mine, on the 14th inst.,—J. H. HITCHENS, Esq., in the chair,—the purser read the proceedings of the last meeting, the committee meetings since: it was resolved, that they be adopted—that Messrs. Phillips, Ward, and Dawe be appointed auditors to inspect the accounts, and report to the next meeting on the 5th of December next; to receive the same, and make a call, and that reasonable expenses be allowed the auditors—that Capt. Rodda be appointed resident captain, at a salary of 7*l.* per month, and that his firing be allowed—that Mr. Bayly be secretary and purser, at a salary of 4*l.* 4s. per month, and 1*l.* 1s. per month for a clerk—that Messrs. Edgecumbe, Ward, Dawe, and Skinner, be added to the present committee, and that copies of the report and these resolutions be printed, and a copy forwarded to each adventurer, with notice of the next meeting.—The following reports of the committee were then read:—*April* 3.—That your committee have agreed with the Perran Company, for the erection of a 40-inch cylinder steam-engine for 1197*l.* That they have employed Mr. William West to inspect the castings, and superintend the erection of the engine on the mine. That the new engine-shaft has been made good, and completed to the bottom, and all the necessary work connected therewith. That the old adit level has been cleared, secured, and made complete into the old engine-shaft; and other preparatory work, which will be required in working the mine permanently and effectually, has been completed.—*Nov.* 13.—Your committee beg to refer to their report of the 3d April last, which, owing to the absence of a sufficient number of adventurers, was not presented to the general meeting. Your committee have to report that, since that period, the engine has been erected and completed; and it is hoped that, on inspection by the adventurers, at their meeting to-morrow, it will be found to work satisfactorily. That Captain Rodda has been appointed the resident captain on the mine, at a salary of 7*l.* per month, subject to the approval of the adventurers. Your committee beg to refer to Capt. Rodda's report for the future operations on the mine since their last report. Your committee recommend that the salary of the secretary and purser be fixed at 4*l.* 4s. per month, to commence from the 1st of February, 1845; and that 1*l.* 1s. per month be allowed for the expenses of a clerk for the same time. Your committee also have to report that, by a statement of accounts, produced to them, it appears that the monthly costs, up to Sept. last, amount to 968*l.* 14s.; the engine, to 1197*l.*; merchants' bills and liabilities, to 1313*l.* 4s. 10d.; which, after giving credit for the first call, will leave a balance of 2198*l.* 19s. 7d. to be provided for. Your committee, therefore, recommend that the accounts be referred to auditors, to be appointed at the meeting of the adventurers; and that an early meeting be convened for receiving the report, and making a call.—The following report from Capt. Thomas Rodda was also read:—I became the resident captain on this mine in February last, since which the following erections and works have been performed:—A 40-inch cylinder steam-engine has been erected, and the engine-house, boiler-house, stack, and blacksmiths' and carpenters' shops, have been repaired. The capstan-round has been made, and capstan and shears erected; bearer holes have been cut, and bearer and cistern fixed. Rods and pumps have been dropped 22 fms. in the engine-shaft, and the shaft has been divided and cased down 12 fms. The bob-pit has been taken out, and balance-bob erected. About 74 fms. of flat-rods, pulleys, and stands have been erected, and a small counting-house and material-house built. At the eastern whim-shaft there is a capstan and shears and balance bob erected, capstan-round and bob-pit taken out, bearer holes and cistern-plat cut, and bearers and cistern fixed, and 26 fms. of rods and pumps dropped. The shaft has been cased down and divided, a bob-plat has been cut underground, box fixed, and the shaft sunk 12 fms. 4 in. The lode in the shaft is about 5 ft. wide, composed of mundic, spar, and rich stones of copper ore, and is a very kindly lode indeed; and I hope to resume sinking the shaft on Monday next: this will constitute the most immediate object in carrying out the trial of the adventure. This shaft is intended to be sunk to the depth of 36 fms., when the lode will be explored by levels driven east and west. In the Old Mine the former adventurers raised, in the course of their very partial and inadequate workings, rich copper ore amounting to 1500*l.*; and I believe that the result of the proposed levels and others at increased depths, from both shafts, will render this adventure a permanently profitable and very remunerative one. Samples of the ore raised from the bottom of the eastern whim-shaft in sinking this day, will be produced to you.

WHEAL ALLEN.—A meeting of adventurers was held at the mining offices, George-yard, Lombard-street, on Saturday, the 14th instant,—PAUL NEWMAN, Esq., in the chair. The minutes of the last meeting having been read, a statement of accounts was submitted, showing balance from last account, 3*l.* 0s. 4d.; mine cost from April to Sept. (inclusive), 130*l.* 9s. 5d. = 133*l.* 9s. 9d. By call of 10s. per share, made 15th of May, 128*l.*—leaving balance due to purser, 5*l.* 9s. 9s.—The accounts having been examined, were allowed and passed, and a call of 10s. per share made, payable on or before the 28th inst.; and that the secretary (Mr Henry Thomas) be instructed to apply to those in arrear for the immediate payment of their call.—The following report from Capt. H. Williams was read to the meeting:—Since the meeting in May last we have driven about 50 fms. on the course of the lode, which is about 20° east of north; throughout this driving we have cut one caunter lode, about 2 ft. wide, not kindly where intersected, depth from surface 12 fms.; we have not driven on it, but have pushed into the hill as fast as possible, which has been rather more than 8 fms. per month; average price about 40s. per fm., very little timber required. The lode for many fathoms has been small and irregular until the last 4 fms., in which we cut a slide, which has improved the lode in size and appearance; it is now 18 in. wide, composed of gossan, soft spar, mundic, and black ore—a very kindly lode. A shaft must now be sunk for drawing the stuff, and also for ventilation; it will be about 17 fathoms to reach the back of the level, and will go down speedily, the killas altogether (whatever we have seen) being soft and white. It is impossible to say how many lodes are in the sett, it not having been costeaned; there is a large gossan lode further north that has been opened on; we must drive 80 fms. more to reach this, which will give a back nearly 40 fms.; there appears, from what we have discovered, two other east and west lodes, about 30 fms. north of our present end. From the present appearance of the lode in the end, taking into consideration the chances of east and west lodes, and the soft and kindly appearance of the stratum, it holds out fair promise of making a good mine.

WHEAL CARPENTER.—At a special general meeting, held at the Exeter Inn, Tavistock, on the 6th inst.,—C. V. BRIDGMAN, Esq., in the chair,—the statement of accounts was presented, showing, to amount on three 5s. calls on 512 shares, 384*l.*—By costs of mine to August 21, as per audit, 196*l.* 4s. 11½d.; August month, 52*l.* 3s. 10d.; Sept., 71*l.* 10s. 8d.; less on 58 forfeited shares, on second and third calls, 26*l.* 10s.; unpaid on second call, 5*l.* 10s.; unpaid on third call, 21*l.* 10s.—leaving balance against the company, 10*l.* 19s. 6½d.—It was resolved, that the purser write to all the shareholders in arrear for calls, that unless they be paid to the bankers, before Monday, the 16th inst., the rule of the company for forfeiting such shares will be strictly enforced. It appearing from Capt. Key's report, that the trials upon the lode justify a vigorous prosecution of the mine, but that the present mode of keeping the water by horse-power should not be further persevered in,—it was resolved, that all the works below the lobby be forthwith discontinued, and that a committee be ap-

pointed to investigate the best mode of permanently working the mine, with power to call in any mine agent or engineer; and that a general meeting of the adventurers be held on Friday, the 8th day of January next, to receive their report.—It was also resolved, that Messrs. C. V. Bridgman, J. Edgcumbe, R. Prout, R. Ellis, and Capt. J. Robins, form such committee; and that the captain of the mine do accompany such of the committee as can attend, to inspect the underground workings, whilst the water will admit of their doing so. —That a call of 10s. per share be made, for the purpose of paying the premium of 100*l.* to Mrs. Tozer, for the grant of the sett of her adjoining lands, and for paying the debts and current expenses; and that the purser, in giving notice of this call, do inform the adventurers, that the rule, requiring the payment of calls within 21 days after notice, will now be strictly enforced.—That as the 100*l.* must be paid to Mrs. Tozer to-morrow, the purser be empowered to borrow that sum of the bankers on behalf of the company.—In pursuance of the foregoing resolutions, the purser (William Gulley) has given notice that a call of 10s. per share was made, for the purpose before-mentioned; and that such call must be paid into the Tavistock Bank, to the credit of the purser, within 21 days from the sending of the notice (dated Nov. 9), or the shares will be forfeited, according to the rules of the said mine.—The following report from Capt. John Key was read to the meeting:—We have driven our 10 fm. level west 8 fms. on the north side of the lode, where we have had very fine stones of lead ore throughout; the water increasing so fast here, I thought it advisable to stop this end, and to commence driving east a few fathoms, to prove the lode whilst the water would admit of our doing so. The north wall letting down the water so fast, we drove east about 8 ft. on the south side of the lode, where we cut a branch of copper ore, about 9 in. wide, of very good quality; here a small cross-course intersected the lode, where we had a fine branch of lead for a few feet, when we again cut the branch of copper, which is about the same size (the cross-course has not hove the lode); we have driven this end 8 fms., at 30s. per fm. I cannot say the size of the lode, as we have not been taking down all the lode in driving our end, and I have been afraid to approach near the north wall, as we have already as much water as we can keep by horse-power. The cost now for keeping the water is 18s. for every 24 hours, which, of course, must be stopped, and machinery applied for that purpose. Taking the general appearance of the lode, I must say, according to my opinion, it has a very flattering appearance, and well deserves a vigorous prosecution. I have visited nearly all the mines in this neighbourhood, and cannot point out any new concern that is looking half so promising as this.

Wheal Norris.—A meeting of shareholders was held at the mine, on the 12th inst. The accounts showed balance against the adventurers, July 10, 69*l.* 10s.; June cost, 57*l.* 7s. 7d.; July, 48*l.* 11s.; August, 37*l.* 13s. 1d.; Sept., 95*l.* 8s.=308*l.* 9s. 8d. Received on arrears of calls to July 10, 34*l.*; on call made July 10, 209*l.*=243*l.*—leaving balance against the mine, 65*l.* 9s. 8d.—The accounts, having been examined, were allowed and passed.—Mr. C. A. Yolland having given notice of his resignation of nine shares in this mine, upon the company agreeing to pay the sum of 9*l.*, owing by him for call, it was proposed by Peter Clymo, Esq., and seconded by W. May, Esq., that his offer be accepted, and that the mine from this date be divided into 247 shares, instead of 256, as before Mr. Yolland's relinquishment.—It was proposed by J. Chowen, Esq., seconded by the Rev. E. T. May, and carried unanimously, that the purser be authorised to borrow or overdraw the bank account, a sum not exceeding 350*l.*, for the payment of outstanding bills, and towards future operations, upon security of the steam-engine and other materials at present, and that may be hereafter upon the mine.—The following report from Capt. J. B. Clymo was read to the meeting:—The lode which was intersected some time since in the 35 fm. level, we have now proved to be the main lode; it has been opened upon about 3 fms., and varies from 1 to 2 ft. wide, composed of quartz, can, and peach, spotted with copper ore, and we anticipate favourable results on its development.—*Note, from Mr. J. G. Dymond, the purser.*—"All calls due on shares in this mine are to be paid by the 28th inst., or legal proceedings are to be taken for their recovery."

Wheal Rose Consols.—A meeting of adventurers was held at the mine, on the 10th inst., when a statement of accounts was produced, showing balance from last account of 296*l.* 13s. 4d.; tutwork cost from May to Sept., both inclusive, 535*l.* 10s. 5d.; merchants bills, 394*l.* 11s. 7d.=1226*l.* 15s. 4d.—By Wheal Dyke adventurers, for their one-third proportion of costs to end of Sept., 303*l.* 16s. 8d.; call of 2*l.* per share (made 28th May), 512*l.*=815*l.* 16s. 8d.—leaving balance against the mine of 410*l.* 18s. 8d.—The accounts having been examined and allowed, the balance was divided and collected; the purser reported that, since the last meeting, 2256 shares had been relinquished. It was resolved,—That, for the further prosecution of the mine, a call of 1*l.* per 1-254th share be made and collected forthwith; and that Messrs. Passingham and Simmons be instructed to proceed in the Stannary Court for the arrears of costs due from Capt. Hambly. The following report from Capt. John Webb was read to the meeting:—After completing the engine-shaft to the 20 fm. level, we drove east 6 fms., and intersected the east lode, which is about 8 in. wide, principally flookan, and opened north on it about 3 fms. We have also driven a cross-cut west 9 fms., to the middle lode, and drove south on the same to the boundary, and about 10 fms. north; this lode, on an average, is 2½ ft. wide, composed of flookan, spar, mundic, and occasional stones of lead; there remains 35 fms. to the intersection of the caunter lode, which has produced some good work at the adit level. We are now cross-cutting to the western lode, which we calculate to cut in about a month; this (the west) lode, where it is seen in a shallow level, is 12 fms. west of the middle lode, and presents favourable indications for lead. We consider that three or four months will make an important trial of the different lodes.

[FROM CORRESPONDENTS.]

Caradon Consols.—An improvement has been discovered in a winze in the bottom of the 27 fm. level, from whence some excellent stones of ore are being raised. The shareholders are looking forward with much anxiety to the cutting of the main, south, and Kitto's lodes, at the 50 fm. level, towards which the cross-cuts are approaching.

Great Resugga (St. Austell).—This mine is represented as a very promising adventure, and the attention of local speculators is being attracted to her for investment.

St. Austell Consols.—A very promising lode has been cut in the eastern end, under a shaft in course of sinking, and which is expected will be holed in about a week from this time; until this be completed, nothing can be done on course of the lode towards its development.

Wheal Catherine (near Redruth).—A correspondent writes, that a considerable improvement has taken place in this mine.

Wheal Hellen (late Wheal Trenoweth).—This mine is situated in the parish of Crowan, at the east of, and immediately adjoining, the well-known mines of Wheal Abraham and Cronver, and a little to the north-east of Wheal Curtis. To those who held interests in Cornish mines some 20 years ago, it is quite unnecessary to say anything in reference to the several copper and lead lodes, which traverse this interesting section, whose geological characteristics are of the most congenial constituents for mineral, as is seen, by the fact, that in Wheal Abraham and Curtis, notwithstanding the heavy amount of working cost, the adventurers realised upwards of 340,000*l.* The present explorations were commenced at the close of 1842, by a few gentlemen who were anxious to see the lode at the adit level, the depth of which is 38 fms. at the point of the present operations, which consists chiefly of cross-cut; that driving southward is within 4½ fms. of the lode; and from the rich stones of ore in the ground approaching the vein, it is expected that a rich lode is likely to be met with. At a meeting of the adventurers, held on Tuesday last, the whole cost to end of October, was stated at 1260*l.*, or 6*l.* per share of 1-210th.

Sales of Lead Ores.—Our attention has accidentally been drawn to a letter, addressed to the Editor of the *Chester Courant*, and inserted in that journal on the 26th ult., respecting some remarks made in our City Article [see *Mining Journal*, of Oct. 5] on the proceedings of the smelters at Holywell, in connection with the lead trade of North Wales. It is dated the 23d of Oct., and purports to be written by "An Old Flintshire Miner." That the writer has been a miner, we do not deny; but it is evidently the ebullition of a smelter, if not of one of the gentlemen in that occupation at Holywell. The context proves it. So far from having promulgated misstatements, of which he accuses us, it is he who is endeavouring to mystify the public. If we had committed an error, we should have been most ready to admit and rectify it; but "An Old Miner," instead of communicating with us, or the *Mining Journal*, direct on the subject, publishes his remarks in the district, which he clearly desires should not be disturbed by any strictures. He says, that so great has been the satisfaction given by the smelters at Holywell, that the miners in the neighbourhood have frequently given them a dinner. He knows well that formerly it was the common custom for the miners to regale the smelters; and he knows equally well, if he be either miner or smelter, that it is a usage wholly obsolete—so old indeed, as to be wholly unknown to many sellers. The writer proceeds to remark—"That the prices obtained are fully in proportion to those of lead, is proved by the fact, that of the five smelting companies stated in the ticketing paper, to whom notice of sale is sent, three only are generally the buyers; the others seldom purchase now, but each possesses extensive works, well situated, complete in every respect, and fully prepared for smelting, whenever the prices of ore will afford them an adequate profit. The truth is, that the firms which do not now purchase have their capital locked up in collieries and mines. They are not beaten by competition in the prices of ores, but by the operations, in times past, of the three more powerful rivals keeping down the lead market, so that they might carry on a successful export trade. However, the great and increasing demand for that metal for home consumption has frustrated the efforts of the parties of late years, and the more general erection of smelting establishments will give the finishing stroke to the monopoly at Holywell. It is not to be desired, of course, that further works of that nature should be erected in that locality only, but in places where the ores from different parts of the principality may be sold by sample, before shipment, and where good coal may be brought back as freight, to diminish the expense of transmitting the ore. The want of smelting establishments in other places obliges the proprietors in the more remote parts of the principality to send to Holywell. A seller in that neighbourhood may attend the sales no doubt, but a principal from distant mines never can, without incurring great expense and losing much valuable time. Besides, if a party from a distance were to withdraw his lot, he could have no chance again at Holywell. This is notorious. *He is obliged to sell.* There is no option, and, therefore, it is quite preposterous to argue that there is either fair play or equity in the proceeding.—*Morning Post.*

GREAT WHEAL MARTHA CONSOLS MINING COMPANY.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—I am the holder of a few shares in the Great Wheal Martha, which I observe quoted in your Journal at 2½, with 5*l.* paid. For some months past I have been endeavouring to sell my shares, but cannot find a purchaser at *any* price. Under these circumstances, I think it will be as well not to quote them at all, unless you have proof that actual sales have taken place. From your knowledge of such matters, I think you would confer a great benefit on the proprietors in general, if you would be good enough to take some notice of the mine in an early Number of your Journal. Perhaps you could inform us of the present position and prospects of the undertaking. J. H. M.

Holles-street, Cavendish-square, Nov. 14.

[Our correspondent is not a very attentive reader, or he could not have missed the agents' reports of this mine, which are inserted in each alternate Number. With respect to the disposal of his interest, we presume that he would find but little difficulty, on making application to any of the brokers, whose addresses appear in our front page.]

BALLESWIDDEN MINE.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—In your Number of the 24th ult., under the head "Mine Accidents," there is stated that Hocking was killed in Balleswidden. I had hoped that the individual furnishing the information would have availed himself of one of your two following Numbers, to have retracted the unfounded statement; but as he has not done it, I feel called on, as the principal agent of that mine, to do so: had your informant stated the truth, it would have saved me this trouble. I beg, however, to observe that an accident did occur to the man, in consequence of the unexpected explosion of the hole (which arose, no doubt, from carelessness), and it is feared that he may lose the sight of one of his eyes; in other respects the man is doing very well. R. P. Davy, Purser of Balleswidden.

Penzance, Nov. 12.

[We readily give the communication of our correspondent, and to whom, indeed, we are obliged—our object being alone that of giving correct information.]

ANGLO-MEXICAN MINING COMPANY.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—In your Journal of the 6th inst., I find you have given reports from all the Mexican Mines, excepting those belonging to the Anglo-Mexican Mining Company; and in your Journal, of the 14th November, again no notice is taken of this company (although I know that the accounts received from the agents at Guanaxuato, up to the end of Sept., are of a favourable nature), excepting that, in your corrected share list, you quote the original 100*l.* shares at 1*l.*, and the 25*l.* registered shares at 2*l.* 10s. Have the goodness to explain this, and ascertain at the office, if a *bonâ fide* transfer has really been made at *these prices*, or if it is merely a nominal transaction between two *jobbers*. A. Z.

Scarborough, Nov. 16.

[We thank our correspondent for reminding us of the omission, and assure him it was already in type for this week's publication, and he will find it in another column. With respect to the prices of the shares, we have applied at the office, and find that no transfer of registered shares has taken place for months, and the brokers inform us that those prices are merely nominal—many holders will not part with their shares, hoping for better times.]

SALE AND PURCHASE OF MINE SHARES.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—Will you favour me, and other adventurers, with your opinion on the following question?—Is an adventurer in a mine, knowing such mine to be in debt, justified in law in selling his shares to another party, who thinks the affairs are in a solvent state? and cannot such party recover the amount paid by an action at law?—T. Dunn, Mine Agent: *Tavistock, Nov.* 17.

[We do not think, that the mere knowledge of the mine being in debt, on the part of the seller, even if it could be proved, entitles the buyer to recover, if it was a fair open transaction, at about the market price of the day; but if the buyer can show that false representations were used to induce him to purchase, and an exorbitant price obtained, the seller can be compelled to return the difference between the sum obtained, and the market price at the time of purchase. We knew a case in point, a short time since, in which a mere application, and assurance that steps would be taken, induced the seller immediately to refund the difference.]

MINING PROVERBS.

Sir,—Proverbs may be said, in some measure, to represent abstracts of the wisdom of past experience, just like that which says, that "experience teaches wisdom." There are, doubtless, many unrecorded mining proverbs, which it would, perhaps, be well to transmit and to diffuse; notwithstanding that, as dogmas, they may occasionally retard enterprise and improvement. There are many walking Solomons among our mine captains and residents in mining localities, who might send you a rich list weekly. By way of setting a good example, I will begin with—"A good *bal* makes a good *capper*."—"Mundic rides a good horse."—A. T. J. Martin: *Penzance, Nov.* 13.

Herodsfoot Mine.—A case (Phillips *v.* Boase), argued at the Stannaries Court, Cornwall, on the 9th inst., involved a point which had never before been decided by the Court of Stannaries. Mr. Stokes made an application to the court upon a petition in the nature of a bill of discovery which he had filed against the defendant, Boase, as purser of Herodsfoot Mine, with the view to obtain from him, as purser, information as to accounts, papers, and books of the mine, and more particularly, with respect to a transfer of some shares in the mine from the plaintiff, Phillips, to a person of the name of Smith. The petition prayed, that until such discovery was made, the proceedings in the suit which Boase had instituted against Phillips, for the recovery of costs due on shares, might be stayed. Mr. Stokes stated that this course had been adopted, in consequence of the purser refusing to give the information which Phillips required, but which he, as purser, and being the agent of Phillips, was bound to communicate. Mr. Stokes further said, it was doubted whether Phillips had a right to examine Boase on a petition which the latter had filed; but if his Honour thought Boase might be compelled, on that petition, to be examined upon oath, and to disclose the information required, then the petition for discovery might be abandoned.—Reference was also made to a recent case, in which the Vice-Warden had refused an application by Mr. Stokes to examine a purser upon oath; but that was in the case of an ordinary creditor's petition, and not in the nature of a proceeding in equity.—The Vice-Warden, in deciding the point at issue, said he considered that Boase, although plaintiff in the petition against Phillips, might be examined upon oath, and compelled to produce all his books and documents relative to the mine, and the transfers of shares therein; and that he ought to do so, had been held in a case antecedently to his (the Vice-Warden's) presiding in that court. At all events, he would suggest that for the present the first petition be allowed to proceed; and if, at the hearing, the information which was called for were not furnished, then such order should be made as the circumstances might require.

Trelawney and Mary Ann Mines—Smith *v.* Lyne and others.—The following are the particulars of this case, which has attracted so much attention in the mining world for some time past, and was particularly adverted to in the *Mining Journal* of the 31st of October, and the 14th inst. The plaintiffs, O. H. Smith, Esq., and others, as well as the defendants, Edward Lyne, James Clymo, and Peter Clymo, jun., were and are co-adventurers in Wheal Trelawney Mine; the former of the defendants acting as solicitor, the latter as purser of the company. Adjoining Wheal Trelawney, and taking the run of its lode, was a sett belonging to Miss Pollard, and made extremely valuable by the discovery of Trelawney. This sett (Wheal Mary Ann) it was desirable to obtain for the latter company; and the purser having applied for it, it was eventually (in July, 1845) granted to the three defendants. This grant the plaintiffs insisted was in trust for them, and their co-adventurers in Trelawney. The defendants, however, insisted that it was for their own individual benefit, and offered *half* of it only to the Trelawney Company, appropriating the other half to themselves, worth at the present time 10,000*l.* To this arrangement many of the Trelawney Company, in ignorance of the actual nature of the transaction, consented. The plaintiffs, however, refused to accept anything less than what they considered themselves fairly entitled to; and, not being able to obtain this from the defendants, immediately filed a bill in Chancery against them. On the 20th of March last, the case was heard before the Master of the Rolls, and occupied two days; but ultimately it was agreed, that the motion of the plaintiffs (who applied for an injunction to restrain the Clymos from parting with their interest in Wheal Mary Ann, pending the litigation) should stand over, and the parties to communicate, with a view to an arrangement. Soon after an arrangement was made, the Clymos undertaking to give up to the plaintiffs at once the interest in Mary Ann they originally offered, and to leave to arbitration the claim of the plaintiffs to the further shares. The arbitrators appointed were—Capts. W. Richards, of Redruth, and Mr. Francis, of the United Mines; umpire, J. Rundle, Esq., banker, of Tavistock. On Tuesday, the 27th ult., the arbitrators met at Liskeard; when the whole case was thoroughly gone into, and the award given in favour of the plaintiffs, *for all shares they claimed, and condemning the defendants in all costs of the suit.*

Alfred Consols.—The copper lode discovered at Phillack some time ago, still continues to improve. It is now upwards of 10 ft. wide, and 16 men were put on Monday last to work in one end, driving on the course of the lode. The engine is expected to work next week.—*Cornwall Gazette.*

MINE ACCIDENTS.

Terrific Explosion of Fire-damp—Twenty Lives Lost.—A sad disaster took place, on Tuesday morning, at Rounds' Green New Colliery, situated at Newberry-lane, near Oldbury, Lancashire. It appears that, between five and six o'clock, some of the men at work in the mine descended into the pit; they were accompanied by the manager and the "doggy," followed by others—in all 25 men and boys. It was the business of the person employed under the manager to ascertain the state of the atmosphere; but whether he did so or not, on this occasion, does not appear. A short time after the descent of the men, the manager (Mr. Holland) discovered that some parts of the mine were filled with fire-damp, and he cautioned his son not to proceed further in the direction in which the mine "rose." The young man, at that moment, turned into a new "gate road," apart from the infected atmosphere. In less than three minutes afterwards, he was startled by the report of an explosion, which, according to his own words, deprived him of his hearing, the candle he held in his hand was extinguished, and he was left in total darkness. So powerful, too, was the effect of the vapour, that he with difficulty preserved himself from suffocation. After a few minutes, he succeeded in groping his way to the shaft of the pit. Assistance was also rendered from the surface as speedily as possible; and, on examining the mine, the scene which presented itself was appalling. Bodies blackened and burnt were scattered in all directions—16 were immediately removed up the shaft dead, three died within an hour afterwards, and another is not expected to survive. The consternation which this sad accident has created in the neighbourhood, it is needless to describe—parents are left childless, and children rendered orphans. An accident so fatal as this may lead to inquiry, as to whether the most effectual means are in existence to prevent their recurrence, and whether those means are efficiently carried out.—An inquest on the bodies of the unfortunate men, was held on Wednesday and Thursday, at the Talbot Arms, Oldbury, merely for the purpose of identifying some of the bodies, in order that they might be buried—the general inquest on the merits being adjourned to Friday. From inquiries made on the spot, it appears that the accident has been occasioned under circumstances that will, in all probability, lead to a Parliamentary investigation; but from the excited state of the district it is difficult to say how the real facts of the case stand. The usual way in which mines are worked, is to construct a gateway to the boundary of the estate, and work backwards, filling up the old sides or cropped parts of the mine, by a brickwork, termed a "dam," so as to confine the fire-damp, and enable the miners to work the new veins. It is stated that, in the present case, the mine has been worked forwards, from the bottom of the shaft, and that the old croppings had been built up by timber and rough brickwork in a somewhat loose manner, and that the accident had been occasioned by an escape of gas from some of these old sides, which had to be constantly passed by the miners with their lamps, and thus led to the explosion. To-day every effort has been made to clear out the mine; but the explosion has been so extensive, that every gate was found blown to pieces, and the escape of gas was so great, that it was with difficulty the gateway could be cleared. Some idea of the extent of the calamity may be formed from the fact, that, by the death of the married men, 102 orphans will be thrown on the parish, the widows being generally in very poor circumstances. The proprietor of the estate is disposed to deal most liberally towards the bereaved families, but the destitution occasioned by the accident must entail a heavy charge on the district. In these circumstances, and especially in view of the fact that such accidents are becoming very common, and, in most cases, are the result of carelessness or recklessness, which might be prevented, the feeling is strong in the district, that something should be done by the Legislature, which would have the effect of preventing, as far as may be, similar occurrences in future. The mines in Staffordshire appear to be particularly liable to explosions, from the highly gaseous character of the strata, in proof of which it may be stated, that at Wigmore a pipe has been introduced a few feet into the earth, and the gas is now burning from it constantly.—On resuming the inquest yesterday morning, an official letter was read from the Home Secretary's Office, signed by S. M. Phillips, Esq., the under secretary, inquiring whether the precautions recommended in the report of the commission on the Haswell explosion in Sept., 1844, and those by Messrs. Lyell and Faraday, had been attended to? This, we trust, is only a forerunner of further interference on the part of Government, to insure the most scientific measures known, being adopted in the working of coal mines, in spite of the cupidity of their owners and agents. Mr. Haynes, the mine surveyor, produced a plan, and gave as his opinion, that every possible precaution had been taken; several of the jury, however, differed with him very considerably. Mr. Brettell and the other gentlemen appointed officially to examine the mine, stated, that it was so charged with "after-damp" that it could not be entered before Saturday at the earliest (this day); the inquest was, therefore, adjourned to Monday. By this awful calamity, 52 women and children have become chargeable to the parish.

Heath Colliery.—An accident occurred here, on Thursday, by the breaking of the checks of a pulley in the shaft, by which the pumping of the water was impeded; and had it not been that a gateway had been constructed to connect this colliery with the Lewisham Colliery, by which the colliers escaped, 70 men would have been drowned.

Victoria Colliery, Dukinfield.—A sad accident happened here on Thursday, by which four men were dreadfully burned by an explosion—two (Kenyon and Harris) are not expected to survive.

Oldbury.—J. Bird, a "doggy," was killed by a fall of coal in Mr. Williams's Colliery. It appears that Bird and Mr. Woodle, the "butty," went down the pit together in the morning, when Mr. Woodle, fearing that there was danger, in consequence of a crash which he had heard, cautioned Bird not to proceed further in the pit; but the unfortunate man disregarded the warning, proceeded a few yards, when a sudden fall of coal, about 4 tons, took place, crushing him into a bruised and shapeless mass.

New Pittington, Durham.—W. Judson was crushed at the Londonderry pit.

Ludworth Colliery, Durham.—J. Wilkinson was killed while working here.

Current Prices of Stocks, Shares, & Metals.

STOCK EXCHANGE, Saturday morning, Eleven o'clock.

Bank Stock, 7 per Cent., 206	Belgian Bonds, 4½ per Cent., 94¾
3 per Cent. Reduced Ann., 93¾	Dutch, 2½ per Cent., 58¾
3 per Cent. Consols Ann., 94¾	Brazilian, 5 per Cents., 84
3 per Cent. Annuities, —	Chilian, 6 per Cents., —
3½ per Cent. Ann., 95¼	Mexican, 5 per Cents., 21¾
Long Annuities, 9¼	Spanish, 5 per Cents., 26¾
India Stock, 10½ per Cent., 257	Ditto Deferred, —
3 per Cent. Consols for Acc., 94¾	Portuguese, 4 per Cents., 36
Exchequer Bills, 1000*l.*, 11 8 11 pm.	Russian, 5 per Cents., 111

Mines.—The mining share market continues to receive very favourable support. The business transacted this week has not been to a very large amount, still the number of shares which have changed hands have been numerous; and, in several instances, an advance upon our former quotations. We may, therefore, reasonably calculate on having a firmer market—in this supposition we are assisted by the advices from our correspondents, of several improvements that have been made in the western part of the county of Cornwall. Although last week we adverted to discoveries having been effected in the eastern part, we omitted naming Trelawney, Caradon Consols, Holmbush, Blencowe, Callington, West Wheal Maria, Great Wheal Michell. We will now state that, amongst those mines in the west, which promise well to give an immediate increase to their samplings, may be fairly noticed Treviskey and Barrier, South Francis, Stray Park, Seton, South Wh. Basset, Trenow Consols, Wheal Providence, Tryphena (near Redruth), West Wheal Jewel, Lewis, and Grambler and St. Aubyn. Since writing the above, we are informed of improvements in Great Wheal Maria, Lamberoos Wheal Maria, and Trewallack Mines.—Transactions have been effected in the following mines:—Great Michell Consols, Wheal Concord, Harrowbarrow Old Mine, Wheal Franco, Wheal Fortescue, Blencowe, United Hills, Stray Park, West Wheal Maria, West Tolgus, Treviskey and Barrier, West Wheal Jewel, Trehane, Tincroft, Trewallack, Lamberoos Wheal Maria, Holmbush, &c. In foreign shares several large transactions have been done—Bolanos, Altens, but more especially in the Del Monte loan notes, after which there are many anxious inquiries; Copiapos are very dull, more sellers than buyers.

Railways.—Monday being settling-day, the market was dull—the attention of the brokers being chiefly paid thereto, which, although heavy, came off well. In the early part of the week, Caledonians rose, and East Indian and Blackwalls were more by Thursday; however, business became more dull—prices generally tending downwards; and Caledonians, which had been done at par, receded to ¾ to ⅛ dis.; and the improvements which had taken place in other lines, such as North British, North Staffordshire, &c., have not been maintained. In established lines business has been dull, and French shares exceedingly heavy; indeed, it appears that, if the latter should fall ever so low, little market would be found for them in this country.

Meetings.—*London and South Western:* an extraordinary meeting, to consider contemplated extensions—William Chaplin, Esq., in the chair. The following are the projects agreed to, and sanctioned by the shareholders: arrangements with Staines and Windsor, and Windsor and Staines projects: a line from Staines, through Egham to Farnborough; one from Ascot to the Reading and Reigate, at Wokingham, and one from Barnes Common, by Brentford, to near Hounslow barracks, joining the Staines extension line; to bear a portion of the expenses of three branches forming by the Southampton and Dorchester Company, to Lymington, Blandford, and Weymouth. If all the projected lines are carried out, this company will be in possession of 250 miles of railway.—*Northern and Southern:* under Lord Dalhousie's Act; adjourned for a fortnight.—*Trinidad Company:* as to state of affairs; the receipts had been 28,462*l.* 11s. 6d.; expenses, 14,380*l.* 4s. 4d.—leaving balance, 14,082*l.* 7s. 2d. A resolution, expressive of the opinion that the colony should assist, by granting land, as an inducement to the shareholders, was passed.

We have, in a former Number, alluded to the establishment of the NEW SHARE AND MONEY MARKET, ROYAL EXCHANGE; and we are informed, that a very considerable business is being done under the new system, the regulations of which give such great facilities for the sale and purchase of property. From the daily list, which contains a numerous assortment of railway, mining, and other shares, making, in the aggregate, to a very large amount, it is evident a large portion of the holders and dealers of shares are favourable to this means of transfer.

GOVERNMENT INSPECTOR-GENERAL OF RAILWAYS.—It is rumoured, that Major-General Pasley, has been succeeded as inspector-general by his late deputy, Capt. Coddington.

It is calculated that 260,000*l.* are paid weekly to railway labourers in England.

HULL, THURSDAY.—The market has been strong throughout the week, especially for North British stock, although the entire list may be said now to exhibit a higher range of prices; of course, with a few unpleasant exceptions, such as East Coast, &c. The select committee on railways are putting some very injurious questions to the witnesses. Any undue interference on the part of Government will, perhaps, prove in the end the most fatal step taken by the present Ministry. The "Fifth Estate" will not quietly submit to the dictates of five individuals, not remarkably conversant with the subject they have undertaken.

THAMES TUNNEL COMPANY.

The number of passengers who passed through the Tunnel in the week ending Nov. 14, was 17,618; amount of money, £73 8s. 2d.

CURRENT PRICE OF GOLD AND SILVER.

Foreign gold in bars .... per oz.	£3 17 9	New dollars .... per oz.	£0 4 10½
" " Portugal pieces	0 0 0	Silver in bars (Standard)	0 5 0

RAILWAY SHARE LIST.

RAILWAYS.	*Paid*	*Closing pr. last week.*	*Closing pr. last night.*
Aberdeen	£30	18½	19
Amber, Nottingham, Boston, and Erewash Junction	2½	2¼	2¼
Armagh, Coleraine, and Portrush —25*l.* shares	1½	¼	¼
Birmingham and Gloucester—100*l* shares	100	128½	129
Birmingham and Oxford Junction - 20*l* shares	2	8¼	8¼
Bristol and Exeter—100*l* shares	75	—	81
Bristol and Gloucester—50*l* per share	30	50¾	51
Caledonian —50*l* per share	25	24	24
Chester and Holyhead—50*l* shares	27½	23¾	25
Direct Northern—50*l* shares	2½	1¾	2
Eastern Counties—25*l* shares	14½	22¾	22¾
East Lancashire, 25*l.* shares	14	19½	19
East Lincolnshire	1½	1¾	2¼
Edinburgh and Glasgow—50*l* shares	50	75	76
Edinburgh and Northern	12½	15¾	15
Edinburgh and Perth	3	2	—
Exeter, Yeovil, and Dorchester—50*l* shares	5½	3¾	3¾
Goole and Doncaster—20*l* shares	42*s*	¾ dis.	¼ pm.
Grand Union (Nottingham and Lynn)	1½	¾	—
Great Southern and Western (Ireland)—50*l.* shares	27½	29½	29¾
Great North of England—100*l* shares	100	236	237½
Great Western —100*l* shares	85	137	131
Guildford, Farnham, and Portsmouth—50*l.* shares	5	—	—
Hull and Selby—50*l* shares	50	108	108
Lancaster and Carlisle—50*l* shares	50	68	—
Leeds and Bradford	30	75½	69½
Leeds and Carlisle	2½	—	—
Leicester and Birmingham—20*l* shares	22*s*	¼	—
Leicester and Bedford —20*l* shares	22*s*	¾ dis.	¼ dis.
Liverpool, Manchester, and Newcastle Junction	2½	2	2¼
London and North Western	stock.	198	195½
London and Blackwall	Av. 16*l* 13*s* 4*d*	8¼	8½
London and Brighton—50*l* shares	50	59¼	59
London and Croydon—guaranteed 5 per cent	9*l*	—	—
London and Greenwich	Av. 12*l* 15*s* 4*d*	9¼	—
London and South Western	Av. 41*l* 6*s* 10*d*	67	64¾
London and York—50*l* shares	2½	2¼	2½
London, Salisbury, and Yeovil—50*l* shares	2½	1	1¾
Londonderry and Coleraine—50*l* shares	15	9	8
Lynn and Ely—25*l.* shares	15	16	15½
Lynn and Dereham —25*l* shares	15	15½	15½
Manchester and Leeds—100*l* shares	82	105	102
Manchester and Birmingham—40*l* shares	40	75	74½
Manchester, Buxton, and Matlock —20*l* shares	42*s*	1¼ pm.	1¼ pm.
Manchester and Southampton	2	1¾	1¾
Midland	Stock	132	127
Ditto Birmingham and Derby	Stock	106	103
Newcastle and Berwick —25*l* shares	20	33½	34
Norfolk	Stock 100*l*	130½	131
North British —25*l* shares	25	37½	38
Northern and Eastern—50*l* shares	50	71	75
North Kent and Direct Dover—50*l* shares	2½	—	—
North Staffordshire—20*l* shares	42*s*	3¼ pm.	3½
Oxford, Worcester, and Wolverhampton	17½	7¼	13½
Portsmouth Direct—50*l* shares	3½	4½	4½
Preston and Wyre—25*l* shares	25	33¾	34
Richmond—20*l* shares	15	—	—
Scottish Central—25*l* shares	12½	20½	20
Scottish Midland—25*l* shares	12½	13½	13½
Sheffield and Manchester—100*l* shares	100	—	—
Shrewsbury and Birmingham	3	4	3¾
South Devon—50*l* shares	35	28	29
South Eastern and Dover	Av. 33*l* 2*s* 4*d*	37¼	37½
South Midland—20*l* shares	42*s*	—	—
South Wales—50*l* shares	5	4½	3¾
Vale of Neath	2	1¼	1¼
Waterford and Kilkenny	11	4	5
Welsh Midland	2½	—	—
West Riding Union	42	1½ pm.	2½
Wilts, Somerset, and Weymouth —50*l* shares	15	3¼	2¼
York and Newcastle—25*l* shares	25	45½	38½
York and North Midland—50*l* shares	50	101	93
Ditto Selby—50*l* shares	40	87½	78½

FOREIGN RAILWAYS.

Boulogne and Amiens—20*l* shares	16	14¾	13¾
Bordeaux and Toulouse and Cette (Mackenzie)—20*l* shares	2	—	—
Bordeaux, Toulouse, and Cette (Espalete)—20*l.* shares	2	¼	¼
Central of Spain—20*l* shares	2	¼	—
Dutch Rhenish —20*l* shares	6	5¼	4¼
East Indian	1	¼	¼
Great Northern of France (constituted)	5	10¾	9¾
Great Western Bengal		¼	¼
Jamaica and South Midland Junction—20*l* shares	1	1	1¼
Louvaine a la Sambre—20*l* shares	6	1¾	1¾
Lyons and Avignon—20*l* shares	2	—	—
Luxembourg	4	¼	¼
Namur and Liege—20*l* shares	8	3¼	3¼
Orleans and Vierzon—20*l* shares	10	12¾	12¾
Orleans and Bordeaux—20*l* shares	6	7¼	7¼
Paris and Lyons Constituted	5	5¼	4¾
Paris and Orleans—20*l* shares	20	—	—
Paris and Rouen—20*l* shares	20	35¾	—
Rouen and Havre—20*l* shares	20	26¾	26
Sambre and Meuse—20*l* shares	10	4¾	4¾
Strasburg and Basle—14*l* shares	14	—	—
West Flanders	6	3	—

RAILWAY TRAFFIC RETURNS.

From these returns, it will be seen, that the amount of traffic for the last week, on nearly 2760 miles of railway, was 151,560*l.*, thus accounted for:—78,135*l.* for the conveyance of passengers only, 41,040*l.* for the carriage of goods, and a remainder of 32,383*l.* for passengers and goods together, not respectively apportioned; being an increase over the corresponding week of last year of 12,279*l.*

Name of Railway.	Lgth. Rway.	Present actual cost.	Last Div.	*Traffic Returns.* 1846	1845
Arbroath and Forfar	15	£142,900	3*p.c.*	£203 0 0	£204
Chester and Birkenhead	15	658,293	2½	516 12 0	529
Dublin and Drogheda	32	699,975	3½	707 13 7	671
Dublin and Kingstown	6	349,736	9	696 17 11	720
Dundee and Arbroath	17	156,324	6	285 19 10	285
Durham and Sunderland	19	302,118	2	662 4 4	764
E. Counties & North. & East.	161	4,746,113	5	8656 4 1	5654
Eastern Union	—	—	—	408 0 0	—
Edinburgh and Glasgow	46	2,112,136	6	3836 14 1	2859
Glasgow, Paisley, and Ayr	53	1,301,381	7	2154 8 3	2004
Glasgow, Paisley, & Greenock	23	829,427	2	940 5 1	834
Gravesend and Rochester	7	82,828	—	—	148
Great Western	241	8,885,695	8	16704 8 9	16548
Hartlepool	—	—	—	—	1457
London and North Western	440½	16,327,526	10	35654 9 0	34067
London and Blackwall	4	1,081,273	1½	793 9 6	741
London & Brighton & South Coast	113	4,670,721	5	7026 2 10	4796
London and South-Western	106	3,648,547	10½	6042 1 10½	5692
Manchester & Leeds	117	4,636,556	8	8108 0 0	6180
Manchester, Bolton, & Bury	10	842,725	5¾	—	945
Midland Company	331	8,831,195	7	16792 11 5	15462
Newcastle and Carlisle	65	1,137,385	5	2335 0 4	1776
Norfolk	59	985,080	8	1555 10 4	1278
North British	72	1,461,195	—	1349 8 1	—
Preston and Wyre	29	432,014	2½	610 18 5	490
Sheffield and Manchester	49	1,633,331	5	1887 0 9	1064
South Devon	15	778,976	—	310 0 5	—
South-Eastern and Dover	120	6,613,535	5½	7141 6 4	5726
Taff Vale	30	690,229	5	1036 1 3	987
Ulster	25	358,353	5½	776 16 4	627
York and North Midland	162	2,092,979	10	6235 17 3	4915
Northern of France	260	—	4	8616 0 0	—
Orleans and Bordeaux	72	599,040	4	1718 0 0	—
Paris and Orleans	82	2,082,916	9½	7915 0 0	6374
Paris and Rouen	85	1,995,306	8	5792 0 0	5422

PRICES OF MINING SHARES.

*** The United Hills meeting of last week, resolved that an issue of new shares should take place, in order to realise a greater amount of capital—the proportion being one new share to every four originals, at 50*s.* per share; we quoted them at 30*s.* per share, in consequence of learning that some were on the market at that price; these have been since purchased at a fraction above that quotation, and we believe they are now offered below the nominal price of 50*s.* per share.

We also quoted Stray Parks at 19*l.*; this was a great oversight—for we were aware that several transactions had taken place during the week at 20*l.*, and latterly 21*l.*; although late, we now rectify the error.

BRITISH MINES.

Shares.	Company.	Paid.	Price.
1024	Alfred Consols	4½	40
235	Andrew and Nangilles	25½	30
1000	Barristown	4½	27½ 30
4000	Bedford	2½	3¼
128	Besore Lead Mine	14	30
320	Birch Tor Tin Mine	21½	14
8000	Blaenavon	50	40
256	Bodwannick	3	—
100	Botallack	175	300
120	Brewer	—	5
10000	British Iron, New, regis.	10	19
—	Ditto ditto, scrip	10	19
128	Budnick Consols	52½	45
100	Bwlch Cwmerfin	20	—
1000	Callington	19	25
256	Caradon Consols	45	18
256	Caradon Copper Mine	9½	1
256	Caradon Mines	15	15
256	Caradon United	24	10
256	Caradon Wh. Hooper	12	7
1000	Carn Brea	15	100
114	Charlestown	—	200
166	Cloveland	9	7½
1900	Combmartin	5¼	4¼
1000	Combkawn	¼	2
128	Comfort	—	37
5000	Con. Tretoil Mining Ass.	3½	¼
128	Condurrow	36	55
2560	Cook's Kitchen	—	4
1000	Copper Bottom	1	5
1024	Cosheen	4½	30
240	Craddock Moor	15½	24
128	Creeg Brawa	120	200
500	Cubert Mine	12	30
7100	Derwent	8½	5
1024	Devon & Courtney Con.	5	5
1000	Dhurode	2	5
186	Dolcoath	—	40
10000	Durham County Coal	45	9
256	East Alvenney	3	10
112	East Caradon	40	40
2048	East Crowndale	3½	2
128	East Pool	5	20
100	East Rellatian	15	17
9000	East Tamar Consols	1½	2¾
—	East Wheal Albert	1	3
94	East Wheal Crofty	—	275
256	East Wheal Fortune	1½	3
256	East Wheal Kitty	¾	1
128	East Wheal Rose	50	1100
123	East Wheal Seton	9	25
512	Fowey Consols	—	40
20000	Galvanised Iron Co.	10	8
10000	Gen. Mining Co. for Irel.	¾	¾
1000	Godolphin	—	—
256	Gonamena	21	70
128	Gover	23	200
244¼	Grambler & St. Aubyn	—	28
100	Great Consols	1000	400
256	Great Callestock Moors	11¼	12
2560	Great Michell Consols	2	4
256	Great Resugga Moor	1¾	3
512	Gt. Wh. Rough Tor Con.	2	22
100	Grogwinion	5	—
1000	Gunnis Lake	1¼	3
1000	Hanson	14	3
1000	Harrowbarrow Old Mine	5¼	3
1000	Harrowbarrow Consols	2	¼
800	Hawkmoor	3	2
6000	Heigaston Down Con.	1¼	2½
256	Herodsfoot	14	9
10000	Hibernian	12½	1
—	Hobb's Hill	4	3
1000	Holmbush	18	13½
256	Ivy Tor	1¼	2½
827	Kirkcudbrightshire	3½	5½
2048	Lamberooe Wh. Maria	8	4
2048	Lanivet Consols	2½	2
200	Larkholes	1	3
160	Levant	—	90
1000	Lewis	15	10
1280	Llancynfelin	6	10
128	Ludcott	3	3
4000	Marke Valley	10	5½
5000	Mendip Hills	1¾	1¾
20000	Mining Co. of Ireland	7	12
200	Nanterrow Consols	14½	10
128	North Fowey Consols	20	25
100	North Pool	11	6½
70	North Roskear	10½	300
256	North Treburget	4	4½
100	North United	41	20
256	North Wh. Leisure	1¼	4
128	North Wh. Providence	2¼	10
256	North Wheal Rose	26½	13
15000	Northern Coal Co.	23	2
600	Old Delabole Slate Co.	25	45
128	Par Consols	—	900
256	Pembroke	¾	2¼
256	Penhallow Moor	15	4
6000	Pennant	1	1¼
100	Penrhiw	30	65
128	Pen-y-Cefn Mine	50	55
1280	Perran St. George Un.	13	20
128	Perran Wh. Virgin	9½	38
512	Plymouth Wh. Yeoland	1¼	3¼
2048	Prince Edward	1¼	1¾
256	Redruth Consols	3	14
10000	Rhymney Iron	50	25
256	Rose Consols	10	3
1000	Rosewall Hill	1	5
2500	Silver Valley	3	2
256	Sourton Consols	3¼	3
128	South Caradon	10	350
2000	South Dolcoath	2	—
256	Sth. Friendsh. Wh. Ann	7½	14
200	South Harvannah	23	25
194	South Tolgus	2½	7
800	South Towan	10	1¼
256	South Trelawney	12½	8¾
128	South Yeoland	16½	20
128	South Wheal Basset	—	150

BRITISH MINES—*continued.*

Shares.	Company.	Paid	Price.
124	South Wh. Francis	67	200
256	South Wh. Hope	—	5
1000	South Wh. Maria	2½	2
256	South Wheal Rose	11½	1
10000	Southern & Western, Irish	2	4–5
256	St. Austell Consols	7	15
94	St. Ives Consols	—	600
1000	Stray Park	43	22
9600	Tamar Consols	3	5
1024	Tavy Consols	1¾	3
6000	Tincroft	7	10½
256	Ting Tang	89	30
128	Tokenbury	124	15
512	Trehane	2	18½
5000	Treleigh Consols	6	3½
256	Trenow Consols	—	75½
96	Tresavean	10	225
120	Trethellan	5	20
120	Treviskey and Barrier	61	135
256	Trewallack	—	20
128	Trewellard	12	25
000	United Hills	5	2½
4100	United Mines	300	800½
256	Wellington Mines	15	50
128	West Basset	45	10
256	West Caradon	20	200
128	West Cargoll	2	12
512	West Fowey Consols	40	35
—	West Kukewich Consols	—	3
256	West Providence	—	12
200	West Seton	—	50
120	West Trethellan	5	25
256	West United Hills	4	3
256	West Wh. Friendship	7¼	4
3843	West Wheal Jewel	11	2½
2560	West Wh. Maria	¼	2
256	West Wheal Shepherd	—	6¼
256	West Wheal Tolgus	21¼	9¾
256	West Wheal Treasury	14½	10
240	Westerlake	3	3
5200	Wicklow Copper	5	16
184	Wheal Adams	41	30
1000	Wheal Agar	—	—
256	Wheal Albert	10	8
128	Wheal Acland	13	2
256	Wheal Allen	¼	4
368	Wheal Anderton	10¼	11
128	Wheal Ann	—	50¼
128	Wheal Arvose	2	2½
2560	Wheal Barbara	1¼	1¾
256	Wheal Blencowe	—	9
256	Wheal Byon Consols	¼	¾
136	Wheal Clifford	—	190
1024	Wheal Concord	6¼	6
512	Wheal Elizabeth	2¼	3
256	Wheal Fortescue	5¼	8
2048	Wheal Frederick	2	2
384	Wheal Frances	25	26
512	Wheal Fortune Consols	1	6
256	Wheal Gill	19¼	18
128	Wheal Harriet	45	48
2048	Wheal Holwell	1¼	1¾
256	Wheal Jane	6	20
265	Wheal Kendall	11¼	5
256	Wheal Kekewich	4	4
256	Wheal Louisa	5¼	10
256	Wheal Maria (Hayle)	14¼	28
1024	Wheal Maria	1	420
4000	Wheal Martha Consols	5	2¼
256	Wheal Mary Ann	5	70
1024	Wheal Mary (Calstock)	4¾	1¾
256	Wheal Mary Consols	34	25
256	Wheal Mary Lanivet	2¼	8
256	Wheal Mary Pentuan	1¼	4
256	Wheal Maud	1¼	4
128	Wheal Metha	16	100
256	Wheal Norris	9	2
128	Wheal Pollard	12¼	12
210	Wheal Prospect	4	9
128	Wheal Providence	34	40
128	Wheal Reeth	1	60
128	Wheal Rose	40	25
512	Wheal Sarah	2¼	5
99	Wheal Seton	150	800
1024	Wheal Spearne	1¼	8
256	Wheal Sisters	27¼	20
128	Wheal St. Cleer	21¼	15
260	Wheal Trelawney	7¼	130
256	Wheal Tremadne	1¼	8
256	Wheal Trewennan	—	10
128	Wheal Venland	12¼	10
256	Wheal Victoria	2	2
127	Wheal Virgin	—	50
1024	Wheal Walter	4	3
256	Wheal Williams	2	18

FOREIGN MINES.

5000	Alten Mining Company	14½	3
15000	Asturian Mining Co.	6	3
10000	Anglo-Mexican Co.	100	1
3374	Ditto Subscription	25	2½
2000	Bolanos	150	6
12000	Ditto Scrip	15	6¼ ¼
10000	Brazilian Imperial	20	4
12000	Cobre Copper Co.	40	18
8500	Colombian Co. regis.	35	4¼
5000	Ditto Scrip	—	
10000	Copiapo Mining Co.	14	2½
20000	General Mining Ass'n.	20	15½
5051	Mexican Company	59	—
12000	Mocautnas & Cocnes	25	6¼
29320	Rl. del Monte, regis.	28¾	av. 3¼
	Ditto unregistered		
	Ditto Red Debentures	—	21
	Ditto Black ditto	—	18
	Ditto Loan Notes	150	120
7000	Royal Santiago	10	7¼
2000	Pachuca Mines	3	3½
11000	St. John del Rey	15	8½
43174	United Mexican	28½	3½

*** *We should feel greatly obliged by agents, or others interested, furnishing us with such corrections for our Share List as we may not have received through our usual channels of information—our object being, to present as accurate a list of prices as can be obtained—to procure which, we solicit the aid of correspondents in general.*

LATEST CURRENT PRICES OF METALS.

LONDON, NOVEMBER 20, 1845.

	£ s.	£ s.	d.
IRON—Bar *a*..Wales...*ton*	8 15	— 9	0 0
" ..London ..	0 0	—10	0 0
Nail rods "	0 0	—10	15 0
Hoop(Staf.) "	11 5	—11	10 0
Sheet " "	0 0	—13	0 0
Bars " "	11 0	—11	10 0
Welsh cold-blast foundry pig	5 5	— 5	10 0
Scotch pig *b*, Clyde	3 9	— 3	12 6
Rails, average	0 0	—10	0 0
Russian, CCND *c*...	0 0	—	——
" PSI	0 0	—	——
" Gourieff	0 0	—	——
" Archangel	0 0	—13	10 0
Swedish *d*, on the spot	0 0	—11	10 0
" Steel, fagt.	0 0	—16	0 0
" " kegse	14 5	—14	10 0
COPPER—Tile *f*	0 0	—87	10 0
Tough cake	0 0	—88	10 0
Best selected	0 0	—91	10 0
COPPER—Ordin. sheets, *h*.	0 0	— 0	0 10
" bottoms	0 0	— 0	0 11
Chilian, in cakes	0 0	—	——
TIN—Com. blocks *g*...*cwt.*	0 0	— 4	18 0
" bars	0 0	— 4	19 6
Refined	0 0	— 5	1 0
Straits *h*	0 0	— 4	18 6
Banca	0 0	— 5	3 0
TIN-PLATES—Ch., IC *i*, *box*	1 9	— 1	11 0
" IX	1 15	— 1	17 0
Coke, IC	1 6	— 1	6 6
" IX	1 12	— 1	12 6
LEAD—Sheet *k* .....*ton*	0 0	—19	5 0
Pig, refined	0 0	—21	0 0
" common	18 5	—18	10 0
" Spanish, in bd.	17 10	—18	0 0
" American	0 0	—18	0 0
SPELTER—(Cake) *l*	19 0	—19	5 0
ZINC—(Sheet) *m* export.*	0 0	—28	0 0
QUICKSILVER *n* .....*lb.*	0 0	— 0	4 6

a Discount 2½ per cent. *b* Net cash. *c* Discount 2½ per cent. *d* Ditto. *e* In kegs ¼ and ½-inch. *f* Discount 3 per cent. *g* Ditto 2½ per cent. *h* Net cash. in bond. *i* Discount 3 per cent. *k* Ditto 2½ per cent. *l* Net cash. *m* Discount 1½ per cent. *n* Discount 1½ per cent. * For home use it is 32*l.* per ton.

[From our Correspondent.]

IRON.—Welsh and Staffordshire continue steady; in Scotch pigs very little has been done since last *Mining Journal*, and there are sellers at quotations.

COPPER is firm in price, with fair demand.

TIN (English) continues scarce, the supply being unequal to the demand; the stock of foreign is very small—a slight improvement in this metal has taken place.

TIN-PLATES are quiet, and stocks very moderate.

LEAD is steady.

SPELTER is a little firmer, say 19*l.* 5*s.* on the spot; business has again been done at 18*l.* 15*s.* for spring delivery, which continues to be the rate.

[Communicated by Messrs. Whitcomb and Barton, Old Broad-street.]

All descriptions of English iron continue firm, with an upward tendency. Scotch pig-iron has been rather quiet, and but few sales made this week—mixed Nos. may be quoted at 71*s.* to 71*s.* 6*d.*, cash; a further advance of 3*l.* per ton has taken place in English tin. No alteration in other metals.

GLASGOW PIG-IRON TRADE.

Nov. 19.—We advised an improvement in prices in our last—this has not been maintained; and we quote prices to-day at 70*s.* for No. 3; 71*s.* to 71*s.* 6*d.* for mixed Nos.; and 72*s.* 6*d.* for No. 1—cash. A moderate amount of business doing.

DOUGLAS & HILL, Metal Brokers.

HOT AND COLD BLAST IRON.—A correspondent, in Newcastle writes as follows:—Mr. R. Stephenson, the eminent engineer, has been making a series of experiments upon the relative strengths of hot and cold blast iron, the result of which will be a complete revolution in the iron trade. Hitherto cold blast iron has brought a higher price, and has been considered in every respect superior to hot blast. Previous, however, to the construction of the high level bridge at Newcastle-upon-Tyne, intended to connect the York and Newcastle with the Newcastle and Berwick Railway, Mr. Stephenson caused more than 100 experiments to be made with the various sorts of pig iron, the result of which has been to prove that hot blast is superior to cold, in the proportion of 9 to 7; and, moreover, that pig iron, No 3, is better iron than No. 1, which up to this time, has sold much higher in the market.

MEETINGS OF PUBLIC COMPANIES DURING THE WEEK.

MONDAY.....South Friendship Wheal Ann Mining Company—at the mine, at Elever.
Asturian Mining Company—offices, at One.
TUESDAY.....Cambrian & Grand Junction R'way—Mr. Tripp's, London-bridge, Twelve.
WEDNESDAY...Waterford and Kilkenny Railway—London Tavern, Twelve for One,
Madrid and Valencia Railway—London Tavern, at Twelve.
THURSDAY.....Consolidated Tretoil Mining Company—offices, at One.
La Jahottiere Iron Company—offices, at One.
FRIDAY.....Patent Kamptulicon Company—office, at One.
Droitwich Patent Salt Company—office, at Two.
SATURDAY.....Oxford and Worcester Extension and Chester Junction Railway—Mason's Hall Tavern, at Three.

BRISTOL AND POOLE HARBOUR RAILWAY.—Notice is hereby given, that the acting committee of this company will proceed, on the 13th day of December next, to ALLOT the several SHARES.

No application will be received after the 8th of that month.

Dated, November 12, 1846. CASTLEMAN & KINGDON, Secretaries pro tem.

[The detailed prospectus is inserted in another column of this day's *Mining Journal*.]

47

VALUABLE AND EXTENSIVE FOUNDRY & ENGINE WORK, at ALLOA, FOR SALE, for behoof of a sequestrated estate.—TO BE SOLD, BY PUBLIC AUCTION, within the Waterloo Hotel, Edinburgh, on Tuesday, the 8th day of December, at Two o'clock, in the Afternoon, at the GREATLY REDUCED upset price of 5000*l.*, and WITH IMMEDIATE ENTRY,

THE ALLOA FOUNDRY AND STEAM-ENGINE MANUFACTORY, WITH HARBOUR ATTACHED,

Containing most ample accommodation, and every facility for carrying on the business of IRONFOUNDING, LOCOMOTIVE and STEAM-ENGINE MAKING, and IRON STEAM-BOAT BUILDING, on an extensive scale.

The Premises cover nearly Two Acres of Ground; the Buildings are most substantial, having been constructed within a few years entirely of stone. They are particularly well situated for supplies of PIG-IRON and COAL—three large Iron-Works being within a short distance, and coal in the immediate vicinity of the works. The produce of the Manufactory can be shipped from the Harbour belonging to it, free of any dues, and the Stirling and Dunfermline Railway will pass near the Works, and form a connection with all the great lines of railway in the kingdom. The MACHINERY, UTENSILS, and PATTERNS (the latter being extensive and useful), are all of the best description, and in excellent order.

A detailed description of the Works (which are in operation), appeared in the *Mining Journal*, 17th Oct.; and, for further information, application may be made to Mr. Brydie, banker, Alloa; Messrs. Lockhart, Hunter, and Whitehead, W.S., 84, Great King-street, Edinburgh (who are in possession of the titles, and inventory of the machinery, utensils, &c.); or to Mr. Muir, 17, Quality-street, Leith, trustee on the Estate.

Particulars may be had at the office of the *Mining Journal*, 26, Fleet-street, London.

Leith, Nov. 19, 1846.

48

COPPER ORES.

Sampled Nov. 4, and Sold at Pearce's Hotel, Truro, Nov. 19, 1846.

Mines.	*Tons.*	*Price*	*Mines.*	*Tons.*	*Price.*
Devon Gt. Cons. —Wh. Maria	127	£5 17 6	Wh. Friendship	114	£10 2 0
ditto	123	7 9 6	ditto	90	8 10 0
ditto	121	5 10 6	ditto	57	4 10 0
ditto	120	5 7 0	West Caradon	85	6 15 0
ditto	105	5 18 0	ditto	70	6 10 0
ditto	95	7 0 6	ditto	35	10 7 0
ditto	84	9 18 6	ditto	30	4 10 0
ditto	66	5 12 6	ditto	23	12 2 6
ditto	64	5 12 6	Fowey Consols	91	5 12 6
ditto	45	5 16 0	ditto	67	5 19 0
ditto	26	7 17 0	ditto	62	5 9 6
Wheal Fanny	74	3 17 0	South Towan	62	4 11 6
ditto	72	4 14 0	ditto	46	3 18 6
ditto	34	4 15 0	ditto	20	2 12 0
ditto	32	5 10 6	Wheal Lydia	35	4 0 0
ditto	31	4 18 0	Wheal Jewel	45	7 5 6
ditto	19	9 10 0	ditto	43	4 6 6
Poldice	73	5 6 6	ditto	32	4 6 0
ditto	56	3 7 6	ditto	20	3 14 6
ditto	55	4 15 0	Holmbush	106	6 11 6
ditto	51	5 14 0	Bedford United	93	6 8 0
ditto	47	3 10 0	Hallenbengle	54	3 13 6
ditto	41	3 14 0	ditto	20	0 3 0
ditto	13	3 8 6	Wheal Maiden	40	4 4 6
			West Wh. Towan	18	0 18 0

NEW SHARE & MONEY MARKET, ROYAL EXCHANGE.

ADVANTAGES.

1. To facilitate, more beneficially to the public, the *bonâ fide* sale and transfer of shares in public companies and Government securities.
2. To effect a saving to the buyer and seller.
3. To enable the public, under certain regulations, to effect sales and purchases themselves; and
4. To establish a register of all transactions.

EXPLANATIONS.

Scrip and share certificates to be offered for sale must be sent to the Royal Exchange Register-office, and a market price fixed (*i.e.*, between the extreme quotations of the day). A list of such shares, with the price attached, will then appear in the *Times* and other journals. A similar list will be publicly exhibited at the Royal Exchange daily, and at the Register-office, facing Cornhill. Parties in want of shares not comprised in those offered for sale must state the particulars of the shares they require, and the price they will give; and upon giving a satisfactory reference in London, such shares will be included in a list of shares wanted, which will appear in the like public manner, giving information to the advantage of those who may wish to sell; no charge whatever being made for the registration of such "wants" unless a sale or purchase be effected.

The advantages to the public are obvious; for the buyer and seller will, by this means, effect their mutual objects, and save "the turn of the market," which is usually from 2s. 6d to 20s. per share in scrips, and from £1 to £5 per share in the established securities. They will also effect a further saving, by only one party having to pay in each transaction, instead of two as heretofore.

By thus throwing open the money market, the public will be enabled to purchase from the actual owner, and will no longer be compelled to submit to the loss of buying at the highest price and selling at the lowest, the consequence of four parties being employed between the buyer and the seller. For example:—A wants to sell, and B wants to buy, 20 shares in the Manchester and Leeds Railway, which are at 23 to 28 premium (*vide the Times*, Sept. 22); A applies to his broker (1), who goes to a jobber (2), and the sale is effected at 23 pm., the lowest price quoted. B, who wants to buy, applies also to his broker (3), who goes to a jobber (4), and the purchase is made at 28 premium, or the highest price quoted. Thus, four parties interpose; and in the transfer of only 30 shares, £100 are wholly lost to the buyer and seller; whereas, if they could have publicly registered their wants, and thus made them known to each other, each party would save £50.

Parties in the country will possess the facility of making purchases or sales at a price that is fixed and certain, without loss or inconvenience. An open market must offer greater advantages than a market wherein the public are not permitted to enter, and where shares are offered to an individual jobber in the most private manner, and where too frequently it is asserted "no buyer," or in other words, "no market," is to be found, or where an enormous sacrifice is the consequence of "forcing" a sale.

The securities offered in the New Share and Money Market will comprise:—Shares in all railways, joint-stock banks, fire and life associations, mining, gas, and water companies, and an infinite variety of others, and Government securities, British and foreign.

With a view to protect the public against fraud, all scrip shares deposited at the Register office will be referred to the offices of the companies whence they are issued.

Advices of sales or purchases will be forwarded, and proceeds disposed of according to instructions.

Notices of shares wanted, or of shares for sale, must be sent to Stevens, Hansard, and Co., Transfer Register-office, 5, Royal Exchange, London.—N.B. The public are referred to some observations in the City article of the *Mining Journal* of this day.

NOTICES TO CORRESPONDENTS.

The MINING JOURNAL is published at about Eleven o'clock on Saturday morning, at the office, 26, Fleet-street, and can be obtained before Twelve of all the news agents, at the Royal Exchange and neighbourhood.

*** Our next Journal will be on the usual ENLARGED SHEET, and will contain, besides several articles and miscellaneous intelligence, now necessarily omitted—Continuation of the series of papers on the METALLURGICAL TREATMENT OF ORES, &c.

The letter of Mr. J. Harvey (St. Ann's-hill, Wandsworth) shall appear in our next.

A Reader.—The letter never reached us, or the particulars would, of course, have appeared in the Journal.

"Unit" (Leeds).—We are at all times obliged by the transmission of local information.

"B. W." (Fenchurch-street).—The *Mining Journal* was published before Eleven o'clock last Saturday morning, and could have been procured at that hour on application.

THE MINING JOURNAL
And Atmospheric Railway Gazette.

LONDON, NOVEMBER 21, 1846.

With the concluding Number of each year, we publish a compendious table of the contents of the preceding Numbers of the MINING JOURNAL; and, in anticipation of this reference, we would at this time direct the attention of such of our readers interested in the progress of railways, and their connection with the iron trade, to the views contained in our publications, Nos. 547, 565, 566, 567, 569, 571, 573, 574, 578, and 581, referring to the progress of the necessary lines, and the consequent demand for iron to construct them.

In these publications we have steadily maintained that, a network of railway, to give every important town in Great Britain a locality contiguous to a terminus, would, after the weeding of the abortive schemes, *find the required capital for their construction*; and, as evidence of the correctness of this conclusion, we have only to refer our readers to the lines now in *active progress*, by amalgamation or lease, which could not be successfully worked as independent lines. We see, also, that the apprehension at one time of these useful lines being restricted, or altogether impeded, in their construction, from the want of funds, was far too extensively entertained, and that scrip has since, to some extent, passed from the possession of parties unable to meet the calls to others, that have the means of so doing; while it is further evident, the railway companies do not absolutely calculate upon a larger amount of contribution from their shareholders than may be necessary to pay for the land and the expenses of cutting the road—leaving the supply of the materials, to get it into working order, to be obtained from the money they will be entitled to borrow upon the issue of their debentures, when they have the required amount of paid-up capital. This may account for so many of them withholding their purchases of iron, as all the money received upon the calls is, at present, required to purchase land, pay wages, &c.

In the construction of these railways there are, at this time, about 200,000 men employed. It is, we expect, within a reasonable estimate, that, allowing for ordinary engineering difficulties, it may be computed that 1000 men, judiciously employed on a line, will prepare in one month one mile of railway, or 12 miles per annum—hence, 1000 men making in one year 12 miles of railway, it follows 200,000 men would make within the same time 2400 miles. In our publication, 10th ult. (No. 581), we referred to the quantity of iron necessary for one mile of railway, being in 4 rails, necessary chairs, pins, and crossings, equal to 352 tons, which, with the iron required for engines, tenders, roofings, turn-tables, girders, culverts, tanks, &c., is about 700 tons of malleable and cast-iron, equal to 820 tons of pig-iron; consequently 2400 miles of railway will require, in pig-iron, very close upon 2,000,000 tons in 12 months.

To this estimate some foreign demand is to be added; and, in confirmation of our views in No. 574, August 22, connected with the alteration of the Corn Laws, promoting, with the new Tariff in America an outlet for our manufacture, in return for shipments of American corn, we extract the following from the *Morning Chronicle*, 17th inst.:—"The accounts from the United States may be generally said to be promising, as respects the prospects of business with Europe. The new Tariff, coming into operation in a few weeks, promises a large trade in imports from Europe; whilst the opportune demand for American produce on this side, affords them ample means of payment, without any chance of derangement of their currency or exchanges."

In the *Gazette*, of 10th inst., there is notice of application to Parliament, for a bill to construct a railway in India, the outline of which we gave in our publication, No. 573, August 15th; and the East India directors have already, in the report of their chairman, granted two sections of railways in India—one in Upper India, and the other in Bengal; and carried by a large majority, to guarantee 4 per cent. on 5,000,000*l.*, to commence when 1,000,000*l.* has been paid into the India-house. This is without participation in the profits, to be commenced at an ulterior period. The East India Government is to be remunerated by the conveyance of mails, troops, stores, &c. No company has yet been named; but there is no doubt the East India Railway Company will be the one selected, as the sections indicated are portions of the Great Trunk Line.

In the same *Gazette* are notices of 70 new lines, extensions, deviations, &c., in the United Kingdom; and, in two subsequent publications of the *Gazette*, there appear 130 notices in one, and 90 in the other, of applications to Parliament for private bills, most of them for making or altering railways.

One of the latest bills, obtained in the past session, was the London and York, in extent 308 miles, and we see this company in advance of the numerous lines now constructing to secure some part of their iron, and their advertisement for tenders amounts to 70,000 tons. When the bill for the London and York failed to pass in the previous session of Parliament, one of the reasons assigned for its rejection was the low estimate at which some of the necessary items for its construction was computed; and Lord DALHOUSIE (we believe) intimated it was a fallacy to suppose iron could be had for the numerous roads to be made under the prices paid for this material when the London and Birmingham, and Great Western Railways were constructing. There may, however, still be found parties to enter upon contracts under this rate; but, as we observed in our No. 567, July 4th:—"From the fact of several lines of small, or moderate, extent now in operation, that will require iron at near the *same time*, the effect of demand at *certain periods* upon supply, *must have its usual influence upon the market price of iron*; seeing that rails are now 2*l.* and 3*l.* per ton under the cost, when the London and Birmingham, and, subsequently, when the Midland Railway, were in course of construction."

The market closes this week with a firm appearance, and rather indicative of an advance, which would be immediate were the iron-masters in a position to insure the *same amount of work* from their men at an *additional rate of wages*. The requirements for iron, leave no *extra time for play*, and this position of things may for a time check an important advance, but cannot ultimately subdue it.

On reference to the price of Scotch pig in 1836, when there existed no such demand as at present, it will be found the market rate then was 7*l.* per ton—being about double the price now paying for mixed numbers.

In the spring of last year, the market for Scotch pig-iron was at 5*l.* 10s. per ton for the three numbers; Welsh foundry, No. 1, 6*l.* 10s.; No. 2, 6*l.* 5s.; and No. 3, 6*l.*; and rails, 11*l.* 10s. to 12*l.* per ton. Rails are again in appearance of reaching this price; and Welsh pig-iron, being out of proportion to its relative value with rails and chairs, should, as a matter of course, participate in the advance upon this description of manufactured iron. The various requirements for Scotch iron on a mile of railway being about 350 tons of manufactured iron, or 410 tons of pig-iron, is a large addition to the demand as it formerly existed for this make, and the great disparity of the prices then and now, may be changed as the market feels the effect of the extensive demand yet in comparative embryo.

The confusion into which the railway bills were thrown by the inundation of worthless projects, operated on the iron market, to cause the decline subsequent to the spring of 1845; but the progress making with every necessary railway at home and abroad, will have the effect of re-establishing these, if not higher rates, *as a simultaneous demand emanates from the numerous railways, all working to a point that requires iron to complete them.*

The British Iron Company had their half-yearly meeting yesterday, when it appeared, from the report, that only a few calls remained to be recovered from solvent parties, to enable this concern to be wound up altogether. The chairman (Sir GEORGE LARPENT, Bart.), said the last call of 1*l.* per share was sufficient, as had been expected by the directors, to discharge all liabilities. Before the meeting separated, the worthy chairman was rewarded with that unanimous vote of thanks he merited, for his urbanity and integrity throughout the proceedings of this unfortunate company.

In the MINING JOURNAL, of the 7th inst., we offered some remarks on the discontented feelings apparent among the colliers of South Staffordshire; and, although the murmuring has by no means ceased, and the low thunder is still heard in the distance, we are happy to say the horizon around the coal districts has yet remained clear, and no actual storm disturbed the usual progress of trade. Some meetings have taken place, but they have not interfered with the regular working. Many of the notices which were served, having expired, have been renewed, and some new notices given,—still there does not appear a disposition absolutely to refuse working, and the colliers are generally in full employment; but there is evidently a determination to keep up their demands, and hold them *in terrorem* over the heads of their employers. There is still a much greater demand for coals than the supply can furnish, occasioned by the increase of the make of iron; and, although the demand for the latter is not just now quite so large as it has been, the make increases, and several new furnaces have lately been set to work, and others are being constructed in the neighbourhoods of Dudley, Walsall, and Wednesbury; while, in general, enlargements and additions are making to iron-works, which will cause serious increase in the consumption of coals. This scarcity is also felt in the north—so great is the demand for home consumption, that the exports on the Clyde to Ireland have nearly ceased. From Bristol, to the ports of Cork, Waterford, &c. the supply is equally short; and Liverpool not only does not afford any supply to Dublin, but even takes from the Dee what was formerly shipped to Ireland from thence. As the cold weather advances, the demand must still increase; and it becomes a very serious question, how are the poor of Ireland to be supplied with fuel during this dearth of coal? Happily, it has been one of the finest summers for the cutting of peat almost ever remembered; and the immense quantity stacked will, in a great measure, correct the evil.

In the neighbourhood of Whitehaven, great expectations are entertained from the two great winnings of Wellington Pit, under the sea, towards the west, and eastwards under Moresby; Workington has sadly fallen off, and Maryport has become the principal port. A large company, who have opened an extensive colliery, west of Newcastle, look towards Whitehaven as the port of shipment, and they can commence sending 100 waggons per day. It is clear the Cumberland shipping may expect an increased accession of employment, when the Derwent Valley coal-field is opened. With respect to the effect generally of the increase in the make of iron, as causing so enlarged a consumption of coal, many fears are entertained that it will have a most injurious effect, when the present buoyancy shall have subsided, throwing half the hands in the iron trade out of employment, and yet have fixed a permanent high price to coal. There is reason in the fear.

If we were called upon to lay our hand upon what we consider the richest natural inheritance of these islands, we are not sure that we should be at all in error, if we fixed on the coal-fields of England and Wales, as that first and most invaluable gift—not that merely, forasmuch as it furnishes great wealth to individuals, and occupation and maintenance to families by thousands, is it entitled to such rank and estimation—but rather because, as it appears to us, it is one of the most efficient foundations of our manufacturing and commercial greatness. In proportion to its importance as a public gift, is the importance that it be well administered; and the somewhat too frequent occurrence of open and general discontent on the part of the workmen, is to us too clear a proof, that those who have power misuse it, and that the duties of property, whatever is done with its rights, are but feebly and imperfectly discharged—at the same time that we say this, we could not give so much as a look of approbation to the workmen, in their combination and subsequent strike against the masters. We could not, for these three reasons, out of a score of others, with which we could support them—First, because, in our opinion, to raise the price of labour, or extort terms, the parties pressed, willing or not willing, is illegal. We are not absolutely certain, that it is a statutable offence; but, if not within the statute, pressing heavily to get in, and richly meriting a place there; for the second reason, that it interrupts the public service, and puts a lock upon the stream of healthy industry; and, in the third place, if it were neither illegal nor injurious to the public interests, because, in 9 cases out of 10, the men themselves are injured, who take part in such combinations. What their true remedy is, as against the masters, we may point out at another time; but we assure the good men of Staffordshire, that what they are using as a remedy, will, in all probability, turn out to be simply an aggravation of their case. We should have some hope in addressing a few words to the masters, the proprietors of these great estates, if we thought they were a class of men accessable to ordinary reasoning, or swayed by ordinary motives, but we fear to indulge that hope. Considerations, arising out of the justice, or the duty, or the humanity, of the case, can scarcely penetrate to such consciences. The feeble dart of PRIAM, which faintly tinkled on the shield of his pursuer, fell not more uselessly from its object than would, it is to be feared, our exhortations to these wealth-hardened men, to discharge well their duty to those, who, from winter to winter, and throughout a dreary life made drearier by their occupation, do the drudgery of their master's mines. We, therefore, save our breath and our time; but let us tell them, with all requisite earnestness, that even they, sooner or later, must give an account of their stewardship; and it will be well if they shall not be found to have trampled, as opportunity served, on the poor, and the unprotected, or else, by their selfishness, have not made that poverty greater, and that protection less.

At a moment like the present, when the poverty and distress which is visiting poor Ireland, and stalking like a pestilence through the length and breadth of the land, alike paralysing the measures of the statesman, the efforts of the philanthropist, and the anxious exertions of the charitable and humane, it is highly gratifying to find an individual, devoting his time and talents in probing the wound to its inmost recesses, to ascertain the cause of the disease, and thus enabling him to suggest the readiest and most permanent means for its relief. Travelling from village to village, and from hovel to hovel, Mr. THOMAS MULOCK has dived into the character of the Irish peasantry, studied their wants and their wishes, the cause of their distress, and the best and only *sure* means of *permanently* relieving it. In another column will be found a letter from him to Lord JOHN RUSSELL, on the subject, which will be read with more than common interest by every well-wisher of that unfortunate country; and sincerely do we hope it may be the means of inducing both the landowners and the Government to adopt the measures so simply and eloquently explained, and so truthfully depicted, as the only panacea for her present evils.

We were in hopes that our protectionist and anti-free-trade contemporary, the *Moniteur*, had exhausted his talented and *national* arguments, in praising the iron and forgemasters of France, and their system of monopoly, not only to crush the smaller proprietors of mines, who have an insufficiency of capital to compete with them in the market, but to prevent the Government from reducing the import duty on British and other foreign iron, machinery of every description, locomotives, &c.; but we were mistaken, and find, by his observations in the *Moniteur* of the 12th inst., that the "Gallic cock" is still determined to crow forth the ample resources of the iron and forgemasters, to meet all demands that may be required for completing the railways in progress, and those about to be commenced during the ensuing year, without having recourse to foreign importations. Our esteemed antagonist is sadly out of humour at our remarks, and the praise we have bestowed on the excellent letters of M. LEON FAUCHER, the deputy for Rheims, on the iron industry and resources of France, more particularly on the monopoly which exists on the part of the forgemasters, against which there is not only a general outcry on the part of the railway companies and contractors, but the merchants and extensive shipbuilders, who are kept under an *iron* subservience by the masters in the completion of their lines. Speculative projects, to increase the mercantile navy, by constructing a regular line of trans-Atlantic iron steamers, equally suffer—the cost of French sheet-iron engines, and other necessary *materiel*, being so exorbitantly high, they dare not enter into so grand an enterprise; whilst, if the Government would admit the importation of British iron and machinery at a moderate protective duty, for that specific purpose, they would soon be able to construct splendid steamers, which would do honour to the tri-colour flag of an industrious nation like France.

It is against such facilities as these, the monopolists and the *Moniteur* make an outcry, under the pretext that it would tend to the ruin of the mining industry; but the truth is, they know well, should the Government accede to such a beneficial measure for the general good, they could not compete with the extensive importations of metal, which would be made from England, without reducing, by at least one-third, their present high prices; and that they strive, with all their power, to avert, through the columns of their champion, the *Moniteur*, who must be convinced, in spite of all his nationality and protectionism, that the spirit of *free trade* is making so rapid a progress, not only throughout France, but all over the globe, that the Government will, ere long, be obliged to comply with the wishes of an intelligent and enterprising people, and not allow powerful monopolising companies to prevent the commercial prosperity of the country at large. Our contemporary is also chagrined at the just eulogiums we paid to M. DUMON, the talented Minister of Public Works, and the opinion we expressed, that his visit to this country would; no doubt, lead to very beneficial results, in causing a closer intercourse between England and France, by the modification of the import duties on British produce, but particularly iron, machinery, coal, and salt, which are scarce and at extremely high prices on the opposite side of the channel; whilst reciprocal measures should be adopted by our Government, in allowing the entry of French productions at lower duties. No one in France doubts the intelligence and experience of M. DUMON, who is an unprejudiced minister; but, unfortunately for the monopolists and the *Moniteur*, a man is too enlightened for them, if he is known as an advocate of free-trade principles—or, more properly speaking, desirous to see his country flourish, by establishing a commercial intercourse with other nations, by the modification of her customs' duties.

It is seldom that we enter into a controversy with a contemporary; and while, as regards mining matters, we feel that we have a giant's strength, yet, it will be admitted, we ever use it mercifully, and would not crush, or even attempt to injure, an adversary; but, more especially, on an occasion where the weakness he manifests at once secures his safety. We are thus led to offer some prefatory observations, in good feeling and with a kindly spirit towards our zealous contemporary (the *Morning Post*), from the simple circumstance, that he has actually devoted 150 lines—we wish to be particular, so as to follow the example so praiseworthily set by him—to direct the attention of his readers to a subject, on which he says not one word; while, forsooth, we are told that "neither the commendation nor condemnation of our (*M. P.*) articles by the Editor of the *Mining Journal* can be interesting to the public, and *we*, therefore, proceed to the subject of "La Jahottiere Iron-Works," while, most extraordinary is it, that not one word is said deprecatory of the said works, nor is a denial put forward of any statement which has appeared in our columns—although we may observe, *en passant*, that "much ado about nothing" is made of the Utopian scheme, as heretofore demonstrated, of making pig-iron from peat, and which, even if practicable, in no way touches the question at issue.

We are glad to observe, our contemporary should exercise that prudence which we would at all times give him credit for, in abstaining from entering into the merits of a question he does not understand: we say this with all due deference. But as we may be charged with following the exam-

ple set by him, of avoiding the real question at issue, and descending to matters in which we might possibly feel ourselves more interested, we will at once "proceed to the subject of La Jahottiere Iron-Works,"—as our contemporary says, but does not observe; and, at the same time, we will take the liberty of offering some comments on the remarks offered, with reference to the opinions we have expressed, and which we are ready to maintain. Having said thus much, proceed we to the article in question, which appeared in the columns of our contemporary, on the 18th instant. He sets out by stating, that we devoted a column and a half to comments on statements put forward by him, as to the merits or value, or *vice versa*, as affected the company in question, forgetting, at the moment, that an accusation or charge may be made in half a dozen lines, which might be negatived in one tithe the space; while the evidence to support the denial of the charge might render it necessary to occupy 10 times that space, so as to render it clear to the disinterested reader. We are told that, after complimenting our contemporary on the good service he renders the state, we declare his writing to be mere "twaddle." Admitted, my good Sir—but the remark applies to the article under notice, and not to the general remarks which appear; for we should, indeed, be paying ourselves but a poor compliment, if we admitted that we copied the "twaddle" of our contemporary into our columns, and put it forward as worthy of attention, without any remark being elicited, which has been the case in this instance. In others we have ever acknowledged the authority from whence our information has been derived, and of which we have gladly availed ourselves, reciprocating the compliment paid us by our contemporary, and which we are happy to acknowledge. The writer of the article in question is most specious and entertaining; for he endeavours to construe the meaning of our words in a sense which the exercise of common sense could never convey: the paragraph, however, is in itself so confused, that we can only attribute its diction to the confused notions of the writer. We are next told, "that the policy is most unwise, which promotes the lodgment of English gold as capital in France, or any other nation with whom we may be eventually at war." We need hardly offer an apology for the writer of the article in question, for it is quite clear that he is perfectly innocent—he knows not of foreign loans—he never heard of the mines in Brazil, Mexico, Spain, or elsewhere, not forgetting the *quicksilver* of Almaden—he is perfectly unconscious that English capital is employed by the Imperial Continental and European Gas Companies, with a profitable return—while the circumstance of our steam mercantile fleet, which is indebted to foreign climes for its returns, is a matter, of course, beneath his notice. Foreign loans, no doubt, he considers are taken up as national undertakings; for many tens—we might almost say hundreds—of millions have been sent out from this country to aid foreign states; and while France might wage war with Spain, as was once the case, although we presume not on the cards at the present moment, we bought French rentes and Spanish bonds. America and Mexico are now having a freak, and yet both the bonds of the one and other country find a market here, and "English gold" is the sacrifice. However, we must needs repeat the word—there is really too much "twaddle" in the article in question, to allow us either to occupy space, or to do an injustice to ourselves in the estimation of our readers, by following it through,—and hence we will "proceed" (M.P.) to take up the main feature which the article presents, and for which it was, we have no hesitation in saying, evidently written. Our contemporary tells us, if we wish "to be enlightened as to when (or where) the panic results can be produced at home," he will at once tell us, and then do we arrive at the so much desired information. The "present wants of our sister island" are adverted to; and the panacea, or at least a help, is held out in the application of capital to the manufacture of iron with turf or peat in Ireland; and we are indulged with a lengthened paragraph on the advantages attendant on the use of the "peat or vegetable charcoal of Ireland, in lieu of sending money to France to make an inferior (?) article by means of *sulphureous* (we cite the italics) anthracite coal." Now, we conceive that half-a-dozen words, or as many lines at least, will set our contemporary down. In the first place, is he aware—but in kindness we will assume his ignorance—of the attempts made by a noble lord to produce iron by the application of turf? Does he know that Mr. C. W. Williams, of Liverpool, expended some 4000*l.* or 5000*l.* in the attempt to compress turf, and to supersede the use of coal? Is he aware that numerous experiments were made, and papers written by the Royal Dublin Society, and to which we may observe, that we were parties not only in experiments at iron-works in the sister isle (the results of which were transmitted), but also papers written, while no satisfactory results ensued?

We must, however, leave the subject of peat-iron until next week, merely assuring our contemporary that he has discovered a "mare's nest." We are most sincerely devoted to Ireland, and gladly would we advance its interests; but it is somewhat strange withal, that the author of the work quoted by our contemporary (Sir Robert Kane) should, at this very moment, have upon his estates in Ireland a party of trappists, who have located themselves in Ireland, and have left the asylum of Meilleraie, which is in the immediate vicinity of La Jahottiere. As a last word on the present occasion, we counsel our contemporary to be cautious, and not meddle with subjects he does not understand—while a reference to documents will at times enable him to arrive at a conclusion, assuming always that he comprehends the subject on which he presumes to offer remarks.

Joshua Walker, Esq., the chairman of the Brazilian Mining Company, has been elected a director of the London and Westminter Bank, in the room of the late P. M. Stewart, Esq., M.P.

Mining in South Australia.—We have been favoured with some papers, and the perusal of a letter, from this distant colony, up to so late a date as July 9—having arrived in the almost unprecedented short period of 4½ months. From the letter we quote as follows:—"The Burra Burra Mine improves daily, there is 1000 tons of export ore waiting for change of weather and season, to get away, and we can raise 200 or 300 tons per week, if necessary." From the *South Australian*, of July 7, we find that parties who have lately returned from the Burra Burra Mine, described the workings as immense and astonishing. The owners feel satisfied that they shall be able, without any unusual exertions, to raise and export 10,000 tons of ore during the next season. Several new and splendid lodes have lately been discovered, and particularly in one—the average ore has yielded 70 per cent. of copper. The Princess Royal Company are working on an excellent lode 6 ft. big, and the scrip is said to be selling at 40 or 400 per cent. premium. In Hobart Town, the Burra Burra scrip was selling at 90; some of the colonists were talking of buying up as much of this scrip as could be got for exportation. A mine has been purchased by Mr. Moorhead, for an Aberdeen Company, to be called the "Bon Accord," the ancient motto of that city.

The Zinc Company of Corphalia, near Huy, in Belgium, for the manufacture of zinc and lead, have transferred their establishment to a French company, which intends to work the ores on a large scale; the sale price was 120,000*l.* The Government has sanctioned the transfer; and there is very little doubt that, if the new company carry out the improvements they have announced, it will prove a lucrative speculation.

Montreal Mining Company.—Letters, dated Oct. 28, state that "Canada has hitherto suffered commercially from the want of sufficient articles of export to preserve the balance of trade—lumber, staves, potash, and bread stuffs, forming the total of all she can furnish in this way; but it is gratifying now to know, that the most sanguine and well-founded expectations are entertained regarding lately-discovered mineral wealth of those districts of the colony in the west, bordering on Lake Superior. Four specimens of copper ore have been sent home to be assayed by Messrs. Johnson and Sons, of Gresham-street, who, by a report dated 2d September, 1846, state, that of the samples submitted to them, No 1. gave 85 per cent. of copper; No. 2, 74 per cent. of ditto; No. 3, 61 per cent. of ditto; and No. 4, 16 per cent. of copper, and about 44 per cent. of silver. These specimens were from five separate localities belonging to the Montreal Mining Company; and it is said that, more recently, other locations have been found, which abound in ore of a still richer character. A valuable and extensive field is thus opened for capital and enterprise, which is being prudently but energetically directed towards this new feature in the natural resources of this fine colony. The Montreal Mining Company has, as its board of directors, Sir G. Simpson (president), with the Hon. G. Moffatt, the Hon. P. M'Gill, and Mr. Gringan (members)—names of such high standing and consideration in this country, as to dissipate the possibility of a suspicion that any attempt will be made to enter into reckless or unprofitable speculations. In this age of bubble companies such a guarantee is of no little value."

Croydon Atmospheric.—The power of the 15-in. atmospheric pipe, over the New Cross incline (1 in 100 for about three miles), it is expected will be tested within a fortnight.

A pneumatic machine of 200-horse-power, and a condensing engine of 20-horse-power, has just been tested on the Paris and St. Germain Atmospheric. M. Flaschat, engineer, conducted the experiments, which were in every respect successful.

PROGRESS OF FRENCH MINING INDUSTRY.

[FROM OUR PARIS CORRESPONDENT.]

The interest, of which the *Mining Journal* is the organ, has reason just now to heap curses both loud and deep upon the *Times* newspaper. In one of its recent thundering articles on the Spanish marriage question, the broad sheet of Printing-house-square suggested, that the surest and shortest way of re-establishing the broken *entente cordiale* between England and France, would be for the latter to accord us a treaty of commerce. This has enabled the protectionists to contend, with, it must be confessed, great justice, that to purchase the *entente cordiale* at such a price (assuming, as they assume, that, in the Spanish affair, the French Government is in the right) would be for France national dishonour. They accordingly make an appeal to all Frenchmen, whether they will allow their Government to sacrifice what they call the "national" industry, for the good graces of the British nation? The appeal has been answered, as was to have been expected, with an indignant "no;" and even the organs of free trade themselves have declared, that they will never consent to see their principles adopted, at the expense of a bargain, which would be mean, dirty, and disgraceful. Some of the leaders of the free traders have, moreover, declared, as I am told, that the bait thrown out by the *Times*, so far from having the effect the *Times* anticipated, will, even in the most favourable circumstances, render it impossible for the Government to propose any modifications whatsoever in the tariffs, and especially in the iron duties, during the present year. In France, you know, the great mass of the people are the most benighted and stupid blockheads under the sun, as respects matters political; and, as regards foreign politics, have no other idea in their shallow brains, than that it is a patriotic duty to hate, with intensest hatred, the horrible and perfidious *Anglais*. When, then, the protectionists tell them, that if the Government shall propose to let them have cheaper calico, cheaper cloth, cheaper iron, and cheaper coal, than they have at present, it will only be done to avert the wrath of the perfidious English in the marriage question—they will bawl *à bas les Anglais!* and think that it is a great and glorious privilege—a proof of their national greatness—a means of making "England tremble"—to continue to pay twice as much for calico, cloth, iron, and coal, as such things are worth. It is impossible not to admire the quickness with which the protectionists have turned this truth to account, and the profit they have already contrived to draw from it, in conjunction with the ill-judged, ill-timed, and unwarranted suggestion of the *Times*. But it is deeply to be deplored, that the ironmasters and coalowners and manufacturers of England should have to submit to their interests being damaged by the silly flounderings of a newspaper, which professes to speak in the name of the people of England; and it is to be deplored also, that the great mass of the French nation should, from the same cause, be compelled to support longer than they otherwise would the cruel burden of griping monopoly. Besides this, I should like to know what right the *Times* has to represent that the British nation is ready to allow itself to be duped, insulted, and injured, provided a treaty be accorded, which will put money in its purse? Since when, pray, have our people been disposed to sacrifice national honour for national interest?

Sometime ago, I mentioned that researches after iron ore had been commenced in the department of the Moselle. It appears that they have been crowned with success—for the provincial newspapers state that three separate demands of concession, for sinking what are called "iron mines," on the banks of the Moselle, and near Metz, have been addressed to the Minister of Public Works. The waters lately entered the coal pits of Frigey, whilst 80 persons were at work; one man only lost his life, and no great damage was done.

The newspapers state that, in the department of Jura, deposits of gold and silver have been discovered; but they add, that the statement needs confirmation. They are right—it does.

Such is the immense demand for iron, that nearly all the great establishments are working night and day all the week round. The vast establishment of Messrs. Talabot is particularly distinguished for its extraordinary activity. Its arrangements are so made, as to enable its works to be going every minute of every four and twenty hours. Besides the vast exertions of the old establishments, the new comers are putting forth all their strength to commence operations as early as possible. And, of late, almost every week that has passed, has seen the birth of a new company, for the setting up of a new establishment. This week one has been brought before the public, for establishing iron-works at Chambon, in the Loire. Its capital is fixed at 5,000,000 fr. Both ore and coal are said to exist on the property, of which it will acquire the possession.

In 1844, the importation of coal yielded 3,700,000 fr. to the National Exchequer; that of cast-iron, 3,000,000 fr.; that of iron, 1,300,000 fr.; that of lead, 1,100,000 fr. These figures represent the small amount of 364,000*l.* If the French tariff were what it ought to be, the importation of coal, iron, and lead would yield 10, perhaps 20, times as much; this would afford a great relief in taxation to the French, while, at the same time, they would effect an immense economy, in being relieved from the odious monopoly of their iron-masters and coal miners.

The iron-works erecting near Arignon, between the towns of Aubru and Crausac, are being pushed forward with great activity. Arrangements are also being made for erecting establishments for the working of copper ore near Villefranche. The *Journal des Debats*, of this morning, states that a terrible explosion has recently taken place in the quicksilver mine of Idria, in Illyria, whereby many persons have perished, and great damage been done to property. No details are given.

At the recent meeting of the shareholders of the Bordeaux Railway, it was stated in the report, that the directors had contracted for 30,000 tons of rails, 900,000 *coussinets*, 36 locomotives for passenger trains, and 18 for merchandise. Each rail is to be of the weight of 34 kilogrammes per metre.

The report read to the shareholders of the Strasbourg Railway contained these sentences, which are not unimportant, with reference to the present state of the iron trade of France:—"From Nancy to Metz, the left bank of the Moselle, is bounded with a thick bed of iron ore, similar to that which is employed in the forges of Hayange. In putting these ores in communication with the coal basin of Saarbruck, our line cannot fail to create an immense industrial movement. The trace has scarcely been settled, and already a *haut fourneau* is being built at Champigneulles, near Nancy. The directors, moreover, have profited by the large orders for rails and chairs which it had to dispose of, to cause to be erected on the line, metallurgic establishments, which assure to the company an annual conveyance of great importance in ore, coal, and products. [This confirms what was stated by your Parisian correspondence a long time ago.] The proprietor of the forges of Hayange, with whom we have contracted for a supply of 60,000 tons of rails, is causing to be built at this moment a great iron establishment at Forbach. Another ironmaster, with whom we have entered into a contract for the supply of chairs, is erecting an establishment at Metz, in the line of the railway." The report subsequently sets forth, that the company has treated for 85,000 tons of rails, with the establishments of Hayange and Denain, at an average price of 354 fr. 40 c. the ton, delivered on the railway; for 26,420 tons of chairs, with the establishments of Niederbronn, Apremont, Rimancourt, Moulaines, and others, at an average of 255 fr. the ton, to be delivered on the railway; for 600,000 kilogrammes, or 1,000,000 *chevilles* in iron, with the establishments of Denain and Valenciennes, at 48 fr. the 100 kilogrammes; for 88 locomotives on the different establishments, at 46,500 fr. each for passenger trains, 48,000 each for goods trains.

Advices from St. Dizier, dated the 18th, state that some important bargains for the *fontes blanches* of the Upper Marne, has been entered into at 185 fr. and 190 fr. the 1000 kilogrammes, taken at the furnace. They are said to have been chiefly taken for pay where speculation is brisk. The small number of boats and trains, at present employed, made the price by water to Paris 24 fr. to 28 fr. for iron, and 28 fr. to 30 fr. for the more fragile descriptions of cast-iron. By waggon from St. Dizier to Paris, the price was 32 fr., and with the *embalage* 40 fr.

A considerable deposit of sulphur has just been discovered in Guadaloupe, and the Government has sent out orders to an engineer to examine it, and to take measures for turning it to account.—*Paris, Wednesday.*

Mining at Beeralston (now East Tamar), 550 years ago.—Among the records in the Remembrancer's Office in the Exchequer (Roll 51) is an ordinance of the 26th of Edward I., concerning the king's mines in Devon, in the year 1298. The mines in Beeralston (now the East Tamar Consols) are referred to as having been worked at the king's own cost; and the ordinance directs that the miners and others employed in the king's mines in Devon, should be paid on the Saturday, and "that no miners shall dwell in the market towns on pretence of purchasing meat, nor in any other manner, without leave, beyond the next day at noon." Reference is also made to the Combe Martin Mines, and others, in Cornwall. A tin mine, called Duddods, was also in the king's hands, and 100 tinners are directed to be there smelting the ores, argentiferous galena of the mines at Beeralston. "That the carriage be made as soon as the produce (ore) is measured, as far as the boles or elsewhere; and that the * * and other smelters be there in their own persons, and forthwith receive it by tale as thereunto belongs. And that all the produce of the mine be smelted under good survey, and, so soon as the ore shall be smelted and marked, it be weighed and delivered to the wardens in their common guardship by the smelters, and by tally made between the wardens and the smelters, as to the work belongs, as heretofore it has been there used or commanded and ordained to be there used. And when this metal is delivered to the refiners for fining by the quantity and number of pieces to be weighed, and becomes changed in the manner which follows—that is to say, as soon as the metal shall be fallen and sunk in the moulds on the coals, before the cinders have imbibed any of the metal, that the metal be caused to be stirred and mixed in order that it be equally good throughout, and that thereupon there be taken a quantity of metal weighing to the amount of 6s. or thereabouts, and that such quantity be pierced into two halves, and the one half to be delivered to the finers, under the seals of the wardens, labelled with the date and the name of the refiner, and with the other half be made an assay by the king's assayer in presence of the finery as nearly as he reasonably can, having regard to decrease and abatement in the refiner, or in presence of one of the wardens, if both at any time be unable to attend on account of other business. And that, by this assay, the refiner be charged to answer for all such grand refinery more than takes place in the small way. And when the silver shall be properly and purely refined it be delivered by the refiners to the wardens by tally of weight, so that suspicion or fraud cannot lie with one side or the other." * * * "And that there be five good refiners, who know how to chase as well as refine—for this is most, especially for the responsibility and the charge aforesaid; and that they be at the king's wages by the week, or for certain by the year, or according to the portion of a year that they may continue or be required."

Original Correspondence.

FOREIGN ORES.

Sir,—That both sides of the question may appear in your valuable Journal, you will, perhaps, allow the insertion of the following in the next Number:—

Fact 1.—The quantity of foreign ores raised is in no way dependant on the import duty here. Were the import prohibited, the same quantity would be raised and smelted elsewhere, and, probably, a greater one; since the erection of furnaces, in consequence, and at a more convenient distance, would be far more likely to lead to extended mining operations, than an increased import duty here is to lessen them.

Fact 2.—The continuance of *a* duty will undoubtedly lead to smelting abroad—the erection of furnaces being at this time proceeded with in South America, as well as in the States.

Fact 3.—A regular smelting business being allowed to be established abroad, which, I admit, must be a work of slow growth, it will be found that no alteration in the import duty here (not even a bonus) will afterwards restore to the English smelters the foreign branch of their business.

Fact 4.—The foreign smelters must meet our own in the *copper* markets *abroad*; and although the quantity of copper produced may not then exceed that of the present time, yet, from the sellers being more numerous, and probably less wealthy, and, consequently, less able to hold a large stock, the price must necessarily fluctuate more than it has hitherto done.

Fact 5.—Great fluctuations in the copper market must produce similar fluctuations in the ore market, which will prove more disastrous to the Cornish miner than anything yet suggested to him, by his fears from the free import of foreign ores.

Away, then, with the duty, I say; and let us, whilst we can, keep the command of the copper market of the world. The Cornish miner may rely on it, he is safer in the hands of the present giant smelters, than he would be in the pigmies from abroad—for the former not only can, but do, allow him to keep his head above water, but the latter might have the desire, without the means of enabling him to do so. It cannot but be admitted, that the English smelters have a direct interest in supporting the Cornish mines—the very reverse of which may be looked for in foreigners.—A Constant Reader: *Broad-street, Nov.* 18.

MINING OPERATIONS IN WALES.

Sir,—Previous to entering upon the working and ventilation of collieries, as premised in my communication of the 10th inst., I feel inclined, in order to elucidate that communication, to trespass from my defined course, by an inquiry into the probable course of the present appearances of this extensive coal-field; and this, though not strictly in accordance with the intended object of my communication, I am of opinion will be acceptable, not only to the inhabitants of the principality and the general geologist, but also to those of your readers who have never been favoured with a view of this romantic and beautiful district.

In making the following observations, it must be understood, that I do not rank myself with either the disciples of Hutton or Werner; with the formation or structure of the earth, I do not meddle; and, although my opinions from this treatise might be presumed to be in favour of the latter, yet it must be understood to be my intention to steer clear of any expression of partiality or leaning to the opinions of either party. My observations, though expressed in general terms, must be understood to refer solely to the South Wales coal formation.

In my previous communication I stated, that the country was intersected with hill and dale in regular alternation; and that in the formation of these vales, a great portion of the upper vein had been irrecoverably lost. This general description might probably not convey an adequate idea of its real appearance. I, therefore, purpose, in this communication, to inquire into the phenomena of the formation of these vales, and shall, consequently, more particularly describe them. Let the reader suppose that he is standing upon a flat piece of ground, generally in a high state of cultivation, varying in breadth from 15 yards to 100 or 150 yards, rarely exceeding the latter; that this breadth of ground is bounded on the east and west by mountains (to use a local term) of various widths, and which, upon the opposite or contrary side, serve as boundaries to similar valleys—these mountains rising in several instances abruptly to the height of 100 yards, and often clothed to their summit with fir trees—and he will have an idea, necessarily limited, of the general appearance of the country. Upon a consideration of this phenomena, the inquiry naturally presents itself, what has caused these regular alternating hills and vales? What immense power has removed the deposits, which must, necessarily, from the regular and identical stratification of the mountains, have, at some epoch, filled these valleys, and formed, in several instances, these immense ravines?

No power with which we are acquainted is capable of performing this upon so large a scale, and, at the same time, so completely removing the detritus, with the exception of water; but to the inquiry from whence that supply, I must confess myself utterly incompetent to give an answer—it is an enigma, to which I can give no solution; and it is not my intention to attempt to foist an opinion upon the scientific world, which is not capable by analogy of clear and decided proof. The structure and formation of a tract of country may, in general, be estimated from the size of its hills, and the number and size of its rivers. If a chain of hills, of great altitude, and of an abrupt precipitous form; present themselves, we may generally conclude the tract of country in which they are situated to be of the older formation; and those hills will be found to be principally composed of granite, or some of the primary rocks; and it may be taken as an axiom in geology, that as the height of the hills, so is the size of the rivers—the altitude of the one being generally commensurate with the width and depth of the other; and this rule holds good both in the Old and New World.

This reasoning may appear at first to contradict the assumption, that this district, being so hilly and mountainous, is of the carboniferous formation; but I hope to be able to show, that, from the state and appearance of the country, as already described, it must necessarily be carboniferous—and that, if it were not carboniferous, it could not have assumed its present form and structure.

We may easily suppose, that if the rotation of the earth on its axis was suddenly stayed, that the accumulative waters of the ocean (now congregrated around the earth at the equator), rushing to the poles to find what would then be their true level, would be amply sufficient to produce a deluge, sufficiently large and strong, not only to scoop valleys similar to these, but also to remove our isle from its position, and submerge it under the Northern Ocean. The power and effect of a column of water, 13½ miles high, rushing in one dense mass from the equator to the poles, must be truly terrific. It is sufficiently evident, however, that, for one moment, supposing the possibility of the occurrence, that this catastrophe, though amply powerful, has not been the acting power in the present instance. The valleys and their boundaries, the mountains, bear sufficient evidence of the application of the power in a contrary condition; or from the north, the whole course of the torrent—if so low a word can be used to convey so high an idea—has been from north to south; and, during the flow of that flood, the whole country must have been submerged.

The valleys have invariably an inclination to the south, as testified by the rivulets running down them to the sea; and if the reader will examine a good map of South Wales, he will perceive the truth of this assertion, and he will also see, that they invariably keep a parallel direction with each other, and that, in numberless instances, they apparently preserve the same longitudinal distances from their source to the sea; and, although the best maps will not show the whole of their subdivisions, yet an idea may be formed of their general appearance and character. It must not be supposed that the valleys have one perfectly straight and longitundinal direction—this not being the case; and, paradoxical as it may appear, they are, at successive intervals, crossed by a ridge or mountain, apparently damming or choking the valley, and out of which there appears, at a small distance, no outlet: this appears upon the face of it to defeat my view of the cause of the phenomena under consideration; and when it first presented itself to my notice, suggested the idea of a reconsideration of the whole subject, in order to place it upon more unobjectionable ground; and it was upon such reconsideration that I came to this conclusion, that this phenomena, in reality, serves to place my hypothesis upon a still firmer and broader basis; and had it not been for this apparent anomaly, the subject matter of this letter would probably have been much sooner dispensed with. The question may be asked, and such question appears perfectly reasonable—if the action of water formed this valley, as you contend, how did this mountain stay its progress? Could it scoop this immense valley, and then be stayed by such a comparatively insignificant barrier? In answering these questions, I shall most probably reply

to the strongest objections which can be produced against this theory of their formation: that the action of water formed these valleys, may, I think, from the preceding reasons, be taken for granted.

To the question—how did this mountain stay its progress?—I answer, that mountain never did, nor could possibly have stood for one moment opposed to the torrent; much less have stayed its progress, but would have been swept away, and its place would have formed a continuation of the vale. It is very convenient to substitute a question, for proof, especially if satisfactory proof should not be forthcoming; if I have not answered the second question, I have at least rendered the necessity of its being put in a modified form; but that I may not appear to trifle with that question, I will proceed to inquire into the cause of this ridge, and answer why and wherefore it remained its place, amidst the general ruin which surrounded it, and which threatened momentarily to engulph it. When a valley is hemmed in this manner, it is invariably found to be the case, that the mountain on one side of it is rounded off, and brought to an abrupt close, and often without any diminution of its vertical height; whilst the mountain on the opposite side of the valley, and nearly opposite the above rounding off, or closing, is divided by a ravine, cleft, or valley, running into the one we have already described, and nearly at right angles to it. Now, I contend, if the momentum of the two forces or floods, pouring down each valley, could be ascertained, that the resultant would be another force, beating against the mountain which we have seen rounded off, and sufficiently powerful to abrade it, and produce its present appearance; and that, consequently, the ridge under consideration would be shielded by such resultant from the power of either flood, and would escape the convulsion, to appear, as now seen; whilst, doubtless, if the first power or flood had continued unopposed by the second, that ridge, which appears upon a cursory view to have been sufficiently strong to stem the torrent, could not have withstood its force, but would have been swept away before it. Following up the same parity of reasoning, we may suppose that, if this hypothesis be true, the action of the current would have become materially changed, and would have produced a valley in the line, and direction of the resultant of the above forces; and the angle formed by such valley would be obtuse in the ratio of the strength of those forces. This is not the case; and this supposition, though plausible in theory, is found not to be substantiated by fact; and this one circumstance of disagreement tends to establish this theory of formation, and to prove the general truth of the doctrine here laid down.

It will be evident that, in following up a consideration of the great changes, which have at various times modified and changed the appearance of the surface of the earth, that the mind must be brought to grasp its subject in all its importance—that neither hill, dale, county, nor kingdom, must limit by analogy the force or extent, under similar circumstances, of the operations which have produced these changes. Hitherto, we have supposed, or rather proceeded upon the supposition, that the isolated case of one valley, and two mountains, has been the extent of the scene of the disruptive powers described; and this, although objectionable on some grounds, has, nevertheless, been forced upon us, from the difficulty of expressing in clear and intelligible terms, causes and operations which appear of themselves to be self-evident, and from the wish to give as clear and distinct a view as possible of the phenomena of the appearances under consideration.

Not only has this one valley been formed by the flood; but, at the same moment, a thousand similar valleys have been scooped, and a thousand similar floods have rushed impetuously in their course; and it is owing to the wide-spread desolative power, with which these forces have acted and counteracted with and against each other, that the resultant of the two powers first mentioned must, the moment it had scooped a passage in the mountain (as already described), have been met and counteracted by the force rushing down the opposite side of the mountain; and the resultant compounded of these three forces would necessarily scoop out a valley not in the line of bearing with either of the other; and this hypothesis is found invariably to be borne out by the present general form and appearance of the country. In several instances, the mountain on the side of the second valley, and a little lower than the point of abrasion, is observed to be indented, or very precipitous, either of which appearances would be a natural consequent, and necessary resultant from the operation of these forces; and but for the counteracting force, rushing down the adjoining valley, would have been swept away, and have completely changed the direction and course of the valleys. The southerly part of the country is found to bear powerful evidence of the effects of this wonderful power. I do not presume to offer an opinion, where or how this vast body of water has been produced; but it is nevertheless worthy of notice, that the older formations, on the north and west of the carboniferous formation, do not seem to have experienced, comparatively speaking, any alteration from its powers—although, from the rounded limestone pebbles, found in the higher lands, and which have been left by the flood when subsiding, it is highly presumptive that they have been equally subject to its influence. This, however, is reasonable, on the ground of their harder nature and stronger quality; and it was only when the flood came in contact with the comparatively soft coal formation, that it could display the effects now described, and which have materially, and probably wholly, conduced to produce the splendid scenery of South Wales.

I will not take up your valuable space, by summing up the various objections, and arguments I have adduced against them—nor by showing how other, and equally strong and plausible, objections might be met; but will now close this too lengthened letter, leaving to the penetration and judgment of your readers their general application and force. In my next, I shall enter upon the practical operations of getting the coal, and shall discuss the Welsh and English methods, and shall gladly stand corrected, if in error.—F. B.: *Nov.* 18.

WALKER'S RIDDLING MACHINE.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Knowing your great desire to give publicity and countenance to any invention calculated to facilitate commerce, I respectfully request the enclosed testimonials, on my Patent Riddle, may be inserted in your journal.—ROBERT WALKER, Colliery Viewer: *St. Helen's, Nov.* 19.

[COPIES.]

Ladyshore Colliery, near Bolton Sept. 9.

Sir,—After three months' trial of "Walker's Coal-Riddling Machine," I have great pleasure in stating, that I consider it a valuable invention, that it does its work thoroughly, and with a very small amount of breakage. (Signed) JOHN FLETCHER.

To Mr. R. Daglish, Jun., St. Helen's Foundry,

Standish Colliery-office, near Wigan, Nov. 6

Sir,—Pardon my seeming neglect, in delaying so long to give you my opinion relative to the working of "Walker's Riddling Machine," which Mr. Taylor has had erected at the Standish Colliery. It has been at work about six weeks, and I have given to it a great deal of my time and attention, so that I might ascertain its utility over those screens we have had in use for some time past. I must confess that it far exceeds all other methods of screening, that I have had the opportunity of seeing in the coal districts of Northumberland, Durham, Yorkshire, and Lancashire. I find there are many advantages to be derived from the adoption of the cylindrical riddle, over those in general use: its revolving motion completely prevents the breakage of the coals, and makes a complete separation of the coal from the slack. Besides, there is a great saving in time and labour; and I have no doubt but one riddle, properly erected and worked, would effectually screen four hundred tons of coals and slack in ten hours. When such advantages are to be derived from the adoption of this valuable invention, may we not reasonable expect, that "Walker's Patent Riddling Machine" will eventually surmount all prejudice, and supersede all other modes of riddling and screening coals now in use.

I am, Sir, your obedient and humble servant,

To Mr. R. Daglish, St. Helen's Foundry. GEORGE FORSTER.

St. Helen's, April 20.

Dear Sir,—We have great pleasure in expressing our unqualified approbation of the very beautiful and perfect machine which your ingenuity has devised, and applied to the riddling of coals. The original method of separating the slack from the coal by the common hand riddle had long ago become totally inadequate for the exigencies of the present mode of carrying on the important business of coal-mining; therefore, the imperative necessity for some mechanical appliance became every day more and more pressing, until your patent machine afforded the desideratum, and at once relieved this part of your business of the cumbrous, expensive, and uncertain mode of riddling coals. Since we laid down rails connecting our works with your pits, we have not only a more regular supply, but also a better quality of slack, arising from the circumstance of the whole produce of your mines being immediately brought up to the surface and passed through your riddling machine; thus yielding fresh made slack, and more free of earthy matter. We are convinced that as soon as the advantages of your patent are seen, it cannot fail to be generally introduced. Yours, very respectfully.

To Mr. Walker." CROSFIELD BROTHERS & Co.

Gerard's Bridge and Cowley Hill Collieries, St. Helen's, Nov. 17.

Dear Sir,—After upwards of three years' trial and experience of your Patent Cylindrical Coal Riddles, which were first adopted here, we feel great pleasure in bearing our testimony to the very *perfect* and *economical* manner in which they separate the slack, and *clean the coals* passed through them. They also do their work as well, and appear in as good condition, as the first month they were erected. We are so fully convinced of their great and general utility to the trade, that we not only give you permission to publish this, should you wish it, but shall also be happy to afford any of your applicants, when introduced by you, an inspection of them in operation at our collieries. With our best wishes for the success of your valuable invention, We are, dear Sir, yours, &c.,

Mr. R. Walker, Colliery Viewer, St. Helens. SPEAKMAN, CALDWELL, & Co.

Ravenhead Colliery, St. Helen's, Oct. 3.

Dear Sir,—We feel great pleasure in bearing testimony to the economy of your Patent Riddle, which we have now had at work for some months past, and can confidently recommend its general use, as the superior manner in which our coals have been cleaned since its adoption, afford us the greatest satisfaction. Wishing you the success your valuable invention so well merits, We remain, dear Sir, yours respectfully,

Mr. R. Walker, Coal Agent, St. Helens. BROMILOW, HADDOCK, & Co.

Royal Colliery, St. Helens, Lancashire, Nov. 17.

Sir,—Having used one of your Patent Riddles for about 12 months, we find it to answer very well for separating the dust and slack from the coal, and an economical mode of effecting the same. Your obedient servants,

Mr. Robert Walker. ECCLESTON COAL COMPANY.

In addition to the foregoing testimonials, Robert Walker begs respectfully to invite an inspection of his riddling machines, which have been at work at Gerard's-bridge and Cowley-hill Collieries, near St. Helen's, Lancashire, for upwards of three years. Applications will be promptly attended to, by addressing him at St. Helen's, or Mr. Robert Daglish, of St. Helen's Foundry, Lancashire.

(Signed) ROBERT WALKER, Coal Agent, St. Helen's.

THE PREMIER AND THE POOR OF IRELAND.

TO THE RIGHT HON. LORD JOHN RUSSELL.

MY LORD,—I have read with solicitude and impartiality your Lordship's kindly-meant letter to the Duke of Leinster; and it is perfectly clear to my understanding, that the First Minister of the Crown, is duly sensible of the immense responsibility which devolves upon him, and that he is honestly desirous of doing all that occurs to his judgment and humanity, in order to afford alleviation to the dreadfully distressed condition of the Irish peasantry. Entertaining this favourable opinion of your Lordship, I am the more readily induced to ask your Lordship's attention to a few suggestions which appears to me to be of vast importance, and which proceed from an individual who has no other object in view than the public good. When I state that I have sought for information, amidst the sorest scenes of distress—when I tell your Lordship that I have penetrated into innumerable hovels, crowded with human beings, many of whom have had no potatoes for more than six weeks, and whose subsistence depends on a scanty supply of boiled or baked meal once in each 24 hours; when I further state that in very many instances, whole families are sustained upon cabbage, or the lowest species of bran called pollard; and that cases have come within my knowledge where life is upheld by gifts of these aliments, from the poor to the famishing—your Lordship will not class me with the benevolent speculatists who pity the indigent, without investigating the depths of their distress. I have witnessed wretchedness which I have not words to describe; I have examined closely the operation of all existing plans of relief; and my persuasion is strong and sincere, that they are utterly inadequate to cope with the present calamity, or to avert coming evils. I will not waste myself in detailed censure—fault-finding is the easiest of all acts—what the exigency requires, is sound and beneficial suggestion.

Let me, therefore, without further preface, urge upon your Lordship's consideration the simple proposition contained in the query.—Whether, of all the modes of employing the poor by means of Government advances, any course would be so full of advantage as that of employing the labourers in tilling their own petty portions of land? From the failure of the potato, the occupiers of small holdings are now driven by their destitution of *food* to seek employment on public works, which chiefly resolve themselves into miserable road-making. These poor creatures in supplicating for daily subsistance from public works, must renounce all expectation of tilling their little patches of land, nor have they a spare shilling to hire any one to dig their desolate one, two, or more acres. The road is gravelled, the hill is shaved, the hollow is filled up, but the land from whence the labourer's subsistence should be raised is at this moment overgrown with weeds, nor does their exist any reasonable prospect of its being cultivated for a coming crop—for if the unfortunate owner, beggared of his supply of potatoes, absents himself from the daily road-making, he and his family must do without daily food! Thus, while public works yield a certain degree of succour to the starving peasantry, the soil is stripped of its cultivators, and the hope of next year's produce for the poor man's field is all but lost.

Now, my Lord, I venture to maintain, with all humility, that, if a portion of the amount of public money now expended on works, which will not provide a blade of corn in lieu of the perished potato, were discreetly disbursed in giving present support to the small holders of land, while cultivating that land, a twofold benefit, of unspeakable worth, would be conferred on the community. Present subsistence would be afforded them, at no higher rate of wages than is now paid for public unproductive task work; and the countless acres, which must otherwise remain untilled, would be placed in course of profitable, fosdful cultivation. In cases of proved deficiency of means, I would not hesitate to recommend that seed, either bear or rye, should be gratuitously distributed by the Government—if, indeed, considerate landlords would not (as is my trust) anxiously anticipate the bounty of the Executive. Nor is it irrelevant to remark, that no parties are more interested in promoting some such arrangement as this, than the landlords of Ireland. The bulk of the tenancies on very many estates are actually under 10 acres; and from this class of occupiers their potato subsistence having been swept away by the blight, if a corn cultivation be not speedily substituted, landlords and small tenants will be engulphed in one common ruin.

Now is the time, therefore, to avert, under the Divine blessing, a catastrophe which might prove nothing short of the dissolution of society. Let thinking men now consider what must be the inevitable consequences of drawing off the humble tillers of the earth, from that labour which would prepare it for the production of food, to employment which, though presently useful in the point of wages, is totally valueless in contributing towards the next year's national subsistence. My inquiries have been chiefly confined to the King's County—but, perhaps, no surer sphere of observation could have been selected than this potatoless region. Innumerable occupiers of small holdings of land are either employed on the roads, or clamouring for that alone mode of employment. To many of them have I explained the subject of the present letter; and with native shrewdness of mind they have caught at and comprehended the tenor of my suggestions. I believe that some such measure, as I propose, would be hailed with universal gladness of heart by the panic-stricken peasantry, who not only feel the dreadful present pressure, but who foresee fearfully what must be the result of neglecting their own little tillage. Your Lordship's Government would be deemed the benefactors of the poor, in giving effect to a plan which would manifest parental forecast and compassion for the most suffering classes of the community.

I am bound to assure your Lordship, that I have everywhere noticed an extraordinary extent of submission and patience under the intensity of present privation; and without meaning to detract from the meritorious efforts of other classes, I must give unqualified praise to the Roman Catholic priesthood, for inculcating subjection to authority, and for counselling all practicable punctuality in the payment of rents.

I have the honour to be, your Lordship's obedient faithful servant,

Nov. 13, 1846. THOMAS MULOCK.

MINING IN MERIONETHSHIRE—NEW COMPANY.

[From the *Morning Post*.]

It is an old, and equally true, saying, "that an indiscreet friend is worse than an open enemy," and so must think the lessees of the property of the North Wales Silver, Lead, Copper, and Gold Mining Company, of their would-be friend and champion "Gwir," whose letter, dated Dolgelly, Nov. 10, appears in the *Mining Journal* of Saturday. He has now mooted the most tender and critical point in regard to mineral productions—viz.: the prerogative of the Crown and Sovereign in mining affairs. Not only, "Gwir" declares, does the gossan on the property in question produce remunerative quantities of gold, but the precious metal is, he adds, to be found in the rock—that is, in a virgin state. One of the declared objects of the company is, moreover, to produce gold; so that there really seems to be no misunderstanding about the matter. Now, let us look at the rights of the Crown. By the common law, the Sovereign is entitled, as his prerogative, to all Royal mines of gold and silver; to all gold and silver found in the earth, as well as to the rights of coinage. The prerogative also extends to an exclusive right in the mines and treasures of any conquered country.

Many reasons are given in the old law writers, as the grounds on which this prerogative is founded. One of the most remarkable, and still applicable, is, that if the subjects of a Sovereign had a right to exercise the full power arising out of the possession of gold and silver mines within the sovereignty, they might thereby prove formidable, by reason of their immense wealth, to the great danger of the King's authority, and the disturbance in value of the current coin of the realm. The question has also been raised as to whom mines of tin or copper belong, which contain gold or silver. Formerly the courts of law, in their decisions on this point, appear to have gone so far as to hold that the existence of gold or silver in the ores was sufficient to support the claim to the whole on the part of the Crown; but this would, in effect, be declaring that the property of all mines of the baser metals, with which any mixture of the precious ones might exist, was vested in the Sovereign. This, consequently, appears to have attracted the attention of the Legislature early in the reign of William and Mary, when questions of prerogative underwent considerable examination. We find it enacted, by the 1st William and Mary, stat. 1., chap. 30, "That no mine of copper, tin, iron, or lead, shall be adjudged a Royal mine, although gold and silver be extracted out of the same;" and by stat. 5, of the same reign, chap. 6, sec. 2, provisions are made for the protection of proprietors of mines containg copper, tin, iron, or lead ores, which might thereafter be claimed as "Royal mines," but giving the Crown the right of pre-emption of all the ores of such mines, at certain fixed prices, within 30 days.

In the particular instance of the mines of the North Wales Silver, Lead, Copper, and Gold Company, in the county of Merioneth, it is clear they cannot be fairly denominated mines of either lead or copper, properly so called; for not only is gold said to be found in a virgin state, but the principal staple product is described as a gossan, from which a very considerable—indeed enormous—quantity of gold is extracted—sufficient, in fact, to induce the proprietor to value the mine at 50,000*l.*; it being certain that, as a mining sett of lead or copper ore, it could not be valued, in the present state of its workings, at a tithe of that sum. Here, then, at the present day, a case precisely of that sort which was contemplated in the early ages as possible, and, in truth, not unlikely to happen in later times, by which the wealth and power of the subject might be inordinately increased by the possession of the vast treasures of the precious metals, acquired otherwise than by purchase or legitimate enterprise, so as to interfere with the rights and privileges of the Crown, to deprive the Government of a large revenue, and to disturb the value of a standard metallic circulation.

At all events, the present seems to be a case in which the right of pre-emption may be exercised by the Crown as to the inferior ores; and if, as asserted by "Gwir," large grains or lumps of gold in a virgin state are found, it will prove difficult, we think, to assign any sufficient reason on which the absolute right of the Sovereign to all such quantity of the precious metal can be denied.

Before taking leave of "Gwir," we recommend him to reperuse our remarks; he will find that, so far from wishing to "retard the onward movement of the locality," we declare it is distinctly acknowledged to be one of great mineral deposit. In former articles on metallurgical subjects, we have drawn the attention of capitalists and others to North Wales, as a field for investments in works and enterprises for the production of all descriptions of ores, with the prospect of remunerative returns. Our language on the last occasion was, in fact, totally at variance with the accusations of "Gwir;" and we cannot better close those comments than by making a transcript of them, as they are quite as applicable as when first used, and anything but a "chimerical belief" on our part, that Merionethshire was fast advancing to its proper position. Public attention, we then said, and now repeat, "has been much directed to Merionethshire and Cardiganshire within the last few years; in reference to mining, and it seems to be acknowledged to be a district of great mineral deposit, though consisting almost entirely, as our correspondent remarks, of lead, copper, and slate. It is, therefore, to be hoped, in a national point of view, that no schemes will be brought forward to discourage legitimate enterprise, which is so desirable for the general improvement of this mountainous country; and, we may say, as tending to the comparative civilisation of the working population, by the introduction and mere universal adoption of the English language."

LITERARY NOTICES.

Turning and Mechanical Manipulation: a work of General Reference and Practical Instruction on the Lathe, and the various Mechanical Pursuits followed by Amateurs. By CHARLES HOLTZAPFFEL, A.I.C.E., London.

In the *Mining Journal* of March 25, 1843, we gave an extended notice of the first volume of a series on the above subjects; and we have now before us the second volume, in which the author treats of "the principles of construction, action, and application of cutting tools by hand; and also of machines derived from the hand tools." The first volume embraced, under three divisions, a description of materials from the animal, vegetable, and mineral kingdoms, used in the mechanical arts; the one under notice very properly follows in a description of the cutting tools used in their manufacture—and most valuable will each volume prove, not only to the amateur, but to the engineer and mechanical artisan. The volumes will be extended to six, embracing a consideration of all the superior mechanical arts; and which will form, when entire, a work to which, we believe, none other on the several subjects can compare—which will remain a standard work of reference for all engaged in mechanism or engineering, and a monument to the ingenuity and persevering research of the author. In describing, in his introduction, his object in the several divisions of the work followed, he says—"The chisel was selected as the subject of the first chapter, as, from the simplicity of its form and action, it may be viewed as a keen wedge—sometimes employed with quiet pressure, at other times used with percussion, as in tools of the character of axes and adzes; and the straight chisel, mounted in a stock for its guidance, becomes a plane. Further, the chisel may be used as a turning tool; and many tools of this kind (the second in classification) follow the conditions of chisels and planes, if we imagine the tool to be held at rest, and the work to revolve against it on a fixed axis: the practice of turning is naturally associated with that of boring holes, although, in most cases, the boring tool revolves, whilst the work remains at rest. Turning and boring, each circulatory processes, led to the selection of the screw as the subject of the next chapter—for revolution, combined with rectilinear advance, are exhibited in all the numerous modes of producing screws. Saws were ideally compared with some of the scraping chisels, but with a multiplication of points, and these sometimes arranged in continuous order, as in the circular saw. The file, from its vast assemblage of scraping teeth, was likened to a multiplication of the saw. Shears and punches are next considered, in great measure, as parallel chisels, and the rectilinear edges of shears, although mostly duplicated, bear some resemblance to simple chisels—although, from their duplication, they act on both sides of the material; and, lastly, the ordinary punch is comparable with the rectilinear edges of the shears and chisels, if we do but consider these to be bent into the circular form." The author then proceeds, in the most scientific, yet simple and explanatory, manner, to describe the form and action of chisels, planes, turning tools, boring tools, screw-cutting tools, saws, files, shears, and punches—these are all treated on in the most elaborate detail, embracing a description of nearly every tool hitherto invented—showing their peculiar characteristics and mode of operation. In an Appendix to the volume, there are full descriptions of the more complex kinds of mechanical tools which have been patented, such as carving machines, artificial teeth cutters, or "dentifactors," and a variety of others, too numerous to mention; and two plates, representing some most beautiful specimens of the effects of various eccentric, oval, and geometric chucks, belonging to the rose and other compound turning engines. The whole comprises 570 pages, got up in a most superior manner, and illustrated by upwards of 700 woodcuts.

POWELL'S TRANSFERABLE CARRIAGES.—The difficulties and delays consequent upon a break of gauge, which must take place on the completion of the Oxford, Worcester, and Wolverhampton Railway—the bill for the construction of which was obtained last session by the Great Western Company—in addition to that (at present the only one) at Gloucester, has elicited numerous remedial plans, none of which appear to be so well adapted to meet the exigencies of the case as that invented and patented by Capt. Powell, of the Grenadier Guards. We have, on a former occasion, described the plan; but our attention has just been again called to the subject from an article in the *Railway Register*, clearly illustrated by twelve excellent wood engravings. The principal feature in the invention is, the carriage being divided into two separate parts—the frame, or bed, to which the axles are attached, forming a distinct carriage or truck, on to which the body is made to move by the use of small wheels, or rollers, affixed to the bottom, which is made sufficiently strong for the purpose; these carriages are made of such dimensions that the width is the same as for the narrow, while their length is the *width* of the broad gauge—thus the carriage bodies travel on the former longways, and on the latter sideways; the respective frames, or trucks, are of such size, that on the narrow gauge, each carries two bodies, and on the broad gauge three. On arriving at a station where the break occurs, all that is necessary is to bring up a broad gauge truck in a proper position with the narrow one, and, by means of indented rails on the floors, in which the small rollers of the bodies run, the necessary change is effected with the greatest possible ease, and avoids all the inconvenience, delays, and damage to goods of every description which occur, when unloading and reloading take place.

STAMPING-WORKS.—In order to separate metallic ores from the barren rock or stones with which they occur, and to promote their fusion, it is necessary that the pieces of rock or stone should be reduced to small fragments by stamping them. For those ores which occur in a sandy form, this is unnecessary; and in regard to rich silver ore, which contains very little or no lead, and other metals, the process might be hurtful; for with dry stamping a great deal would fly off in dust, and with wet stamping a considerable part would be washed away by the water. However imperfect the knowledge of the ancients may have been in regard to the fusion of ores, they were acquainted with the benefit of stamping; but the means they employed for that purpose were the most inconvenient and expensive. They reduced the ore to coarse powder, by pounding it in mortars, and then ground it in hand-mills, like those used for corn, till it acquired such a degree of fineness that it could be easily washed. This is proved by the scanty information which we find in Diodorous Siculus and Agatharcides, in regard to the gold mines of the Egyptians; in Hippocrates, respecting the smelting-works of the Greeks; and in Pliny, in regard to the metallurgy of the Romans. Remains of such mortars and mills as were used by the ancients have been found in places where they carried on metallurgic operations; for instance, in Transylvania and the Pyrenees. The hand-mills had a resemblance to our mustard-mills; and for washing the mud they employed a sieve, but in washing auriferous sand they made use of a raw hide. From the latter, Count von Veltheim has explained, in a very ingenious manner, the fable of the ancients concerning the ants which dug up gold. Our works for pounding ore, at present, are stamping-mills, which consist of heavy stampers shod with iron. These stampers are put in motion by a cylinder furnished with cogs, which is driven by a water-wheel, and pound the ore in troughs lined with iron. When the ore subjected to this operation is poor, water is introduced into the troughs, which, running through grates in the bottoms of them, carries with it the pounded matter into a gutter, where it becomes purified, and deposits the mud mixed with sand. One might conjecture that this apparatus was invented soon after the invention of cylinders with cogs; but this was not the case, though I am not able to determine the antiquity of these cylinders. At any rate, it is certain that mortars and sieves were used in Germany throughout the 15th century; and in France, to which the art of mining was conveyed in general from that country at a late period, they were still employed about the year 1579. In the oldest times men were not acquainted with the art of employing water at mines in so advantageous a manner as at present. The bellows were worked by men; and those aqueducts raised on posts, by which distant water may be made to act on machines, was not yet invented. On this account, remains of ore are found in places where the moderns, in consequence of that indispensable article, water, would not be able to maintain metallurgic works. According to the researches I have hitherto had an opportunity to make, our stamping mills were invented about the beginning of the 16th century, and, as appears, in Germany; but I cannot determine with certainty either the name of the inventor or his country. Those who established or introduced the first stamping-works in Saxony and the Hartz are only mentioned; and these, as usual, have been considered as the inventors. In the year 1519, the processes of sifting and wet-stamping were established in Joachimsthal by Paul Grommestotter, a native of Schwarz, named on that account the Schwarzer, whom Melzor praises as an ingenious and active washer; and we are told that he had before introduced the same improvements at Schneeberg. Soon after (that is, 1521) a large stamping-work was erected at Joachimsthal, and the process of washing was begun. A considerable saving was thus made, as a great many metallic particles were before left in the washed sand, which was either thrown away or used as mortar for building. In the year 1525, Hans Pörtner employed at Schlackenwalde the wet method of stamping, whereas before that period the ore there was ground. In the Hartz this invention was introduced at Wildenmonn by Peter Phillip, who was assay-master there, soon after the works at the Upper Hartz, were resumed by Dukelienry, the younger, about the year 1524. This we learn from the papers of Herden Hacke or Hæcke, who was preacher at Wildenman, 1573. As far as can be concluded from his imperfect information, the first stamping-work there consisted only of a stamper raised by means of two levers fixed to the axis of a wheel. The pounded ore was then thrown into a sieve, called in German the *sachs*, and freed from the coarser parts. But as this stamping was performed in the dry manner, it produced so much dust that the labourers were impeded by it, and the ore on that account could not be properly smelted. The business, however, was not given up; new improvements were made, and soon after Simon Krug and Nicholas Klerer introduced the wet method, and fortunately brought it to perfection. It is said, in several modern works, that wet stamping was invented in 1505, by a Saxon nobleman named von Mallitz. This assertion has been so often repeated, that it was known to Gobet, who adopted it as truth. I have not, however, been able to find the historian on whose testimony it is founded; but it appears, by Gauben's *Dictionary of Nobility* that Sigismund Mallitz was chief surveyor of forests at the Erzgeburge, to the electorate of Saxony in the 16th century.—*Beckmann's History of Inventions, &c.*

MANUFACTURE OF COAL GAS AND ITS DISTRIBUTION.

Mr. Thomas Hedly delivered a lecture at the Mechanics' Institution, Devonport, on this subject, which was attentively listened to throughout; and, indeed, the elucidatory manner in which Mr. Hedly delivered his opinions, proved him to be a complete master of the subject. The lecturer opened the question with some judicious remarks, and proceeded at some length to treat of the early introduction and origin of coal gas, and the merits of its first and earliest propounder, Mr. Wm. Murdock, a Scotchman by birth, associated with the eminent engineering house of Boulton and Watt, to whom (there was no question) the entire merit of the application of gas was due. In 1792, Mr. Murdock began his experiments; and before 1802, he had ascertained the economical value of gas. After this time, and by the year 1804, he had introduced gas into many extensive manufactories in England. In 1815, the first gasholder was erected in London. By some oversight, or neglect, it was suffered to get into a dangerous state, and an explosion took place; and the works being in a populous district, great sensation arose, and Government directed an investigation to be made. The result of the inquiry was favourable to the introduction of gas; and immediately after this, it began to make rapid strides in the metropolis,—and, by four years after, it was introduced into the larger provincial towns; but Devonport did not receive the benefit of it until the year 1825-6. The lecturer then proceeded to describe the process of its manufacture. The first and most important part of the gas machinery is the retort-house; in this house is set a number of cast-iron vessels, heated to redness by means of furnaces underneath; into these retorts is put the coal intended to be carbonised—the lid screwed on, and hermetically sealed by means of a lute, and gas is immediately produced. These retorts are of various shapes, mostly in size from 15 in. wide, 12 in. high, and 7 to 8 feet long. As the gas is made, it ascends up the rising pipes, from thence into the hydraulic main—a very ingenious contrivance or valve—by which the gas made, and making, is separated, and its return to the retort prevented. When gas is first eliminated, it is in a highly impure state, carrying along with it the vapour of tar, ammonia, sulphuretted hydrogen, carbonic acid, and other objectionable properties. The hydraulic main acts as the first collector of these impurities—for, by the cooling influence it yields to the red-hot gas in passing through the liquid contained therein, all vaporous impurities are thrown down, and run off to a receptacle, called the tar and ammoniacal cistern, placed to receive them. The gas in this state then goes to be further cooled, which is done by means of what is called the condenser, consisting of a series of cast-iron pipes rising from chambers, in which are division plates, so that the gas is made to pass up one pipe and down another, until it has made its way through the whole series—a distance, depending on the magnitude of the works, of from 500 to 1500 or 2000 ft. In the chambers is deposited all the condensible vapours that escape from the hydraulic main, the condenser being so placed as to be exposed to the greatest cold, and the condensed matter is run off into a receiver placed for that purpose. The next vessel is the first of purification. This is called the washer. This vessel is filled to a certain height with common water. By means of the plate, gas is made to pass through this water, and the use of this vessel is to take from the gas the ammonia contained in it. The next series of vessels are the purifiers, consisting of cylindrical vessels, generally three in number, and placed one above another, for the purpose of running off the contents of the upper one into the second, and the contents of the second into the lowest one. These vessels are charged with an hydrate of lime, or lime and water in solution, first mixed in a vessel placed above the highest purifier, from which, as soon as the valve is opened, it runs, and fills up to a given height. To prevent the lime so mixed from subsiding, which it would do, there is generally a steam-engine, or other motive power, applied to keep the lime in agitation, by means of arms under a plate, and which have received the name of agitators. The lime in these vessels is used, and is well calculated for depriving, chemically, the gas of the sulphur it has imbibed from the coal—most coal possessing it to a greater or lesser extent. When gas was first introduced, the mode of purification was not known—consequently, the gas was very offensive, and useable only in open and exposed places. Latterly, however, the purification has been so much improved and attended to, that gas can, with great advantage, be introduced, and is introduced, into the most magnificent drawing-rooms, and even bed-rooms. When the gas is thus made, condensed, washed, and thoroughly purified, it is then passed through a large meter, called the station meter, by which all the gas made is registered, and an account of it is then entered in a book, as well as the quantity of coal used. From the station meter it passes through pipes into the several gasholders, or stores, where it is kept till required for use; but before it is passed to the town, it is made, in its passage, to go through a governor, of a very ingenious and beautiful description, by the use of which, the exact quantity of gas that may be at any time required, is allowed to pass, and no more, and at a weight or pressure, depending on the requirements of the town, and the regulation of the directors of the company, or the engineer or manager at the works. Mr. Hedly concluded, by announcing that he would deliver another lecture on the same subject, but confined to its applicability and economy.

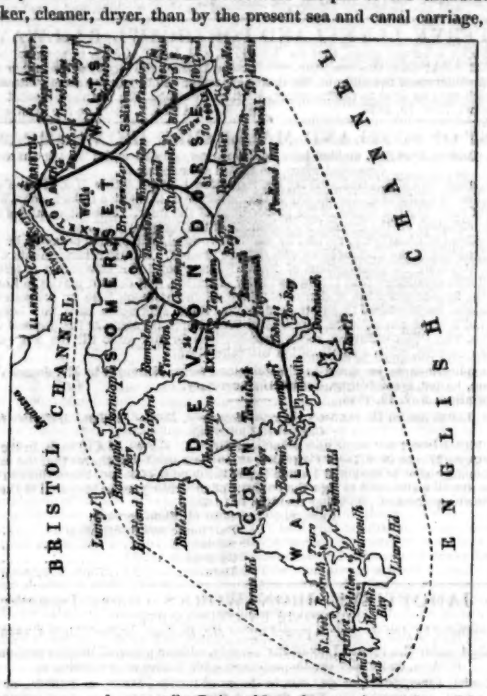
The Southampton Consumers' Gas-light and Coke Company.—We have before us a prospectus of a company formed for establishing gas-works in the ancient and rapidly-improving borough of Southampton, for supplying the inhabitants with a gas of a far superior quality to what they now consume, at a reduction of 30 per cent. on its present cost. Having watched the improvements which have been made in the extraction of coal gas, the increased quantity obtained from a given quantity of coal, its superior quality, and the great reduction which has at intervals taken place in many large establishments in various parts of England, we have no hesitation in stating our opinion, that gas of a very superior description to that generally supplied may be distributed to consumers at 7s. per 1000 ft. (the price proposed by this company), and at even less, producing a large return to the shareholders. This result is, of course, effected by the numerous improvements which have, within the last few years, taken place in the production of this now necessary of life—by better arranged apparatus, less loss from leakage; products, which were formerly valueless, and even a nuisance, now, from their superior nature, become valuable articles of commerce, as naptha, ammonia, &c., and many other circumstances in the minor details of the manufacture. An eligible spot of ground has been secured, and, from the estimates of a long experienced gas engineer, it is calculated that a capital of 50,000*l.* will be ample to furnish works sufficient for the wants of the community. Many complaints have been made of the impurity of the gas now supplied to the inhabitants of Southampton, and the high price at which it is charged; and the introduction of a purer, cheaper, and, more brilliant light will, doubtless, meet with that encouragement which honourable competition deserves.

Church's Patent Coke.—Mr. Church, the patentee of an improved method of manufacturing coke, commenced his experiments with the view to produce an article free from moisture, and less friable than that drawn in an incandescent state, and then quenched with water. His first endeavour was, to allow the coke to cool in the ovens of the usual construction; but, from the great amount of heat retained, he found the plan too costly from the time it took to cool even a small charge: he then introduced cold air, by means of apertures under the floor—these he found had a beneficial effect; and, after various alterations and modifications, constructed the oven, for which he has secured his patent, by which he can burn off, and cool down 8 tons in 90 hours—and a full description of which, illustrated by diagrams, we shall give in our next. When the coke is drawn, it requires no water to cool it, is much harder and compact than ordinary coke, and a larger quantity is obtained from a given quantity of coal. To remove all sulphur from the coke he uses a powerful galvanic battery, to convey a current of electricity through it while in the oven; and there are various other improvements, which we shall detail in our next.

Keating's Cough Lozenges.—These lozenges, which have now been before the public for more than 30 years, have, we believe, until within a few years past, not been known, except among an almost private circulation, through the proprietor not having extensively adopted that only legitimate channel of information—viz.: through the public press. We have been informed that, in asthmatic and consumptive complaints, common coughs, hoarseness, &c., they allay the irritation and tickling of the throat in the night, and give the most decided relief throughout the day. There appears to be an entire absence of opium, or any other narcotic, in their composition, and while they give a healthy tone to the lungs, and bronchial nerves and muscles, they leave the general health unimpaired, and require no confinement or exceptions in diet. Persons labouring under these afflicting maladies, would do well to give them at least a trial

---

Bristol and Poole Harbour Railway.—This line of railway, which we have noticed on several occasions, is beginning to be properly appreciated; and the public, who are likely to derive the most immediate and direct benefits, are bestirring themselves in its behalf. A declaration, in favour of the undertaking, has been signed by the partners of upwards of 80 of the principal and most influential houses in the Potteries; and it is now looked upon with favour in the entire North Staffordshire district, as being likely to bring a large accession of traffic to the North Staffordshire Railway, and, consequently, to all the lines in connection with it. The manufacturers in the Potteries, who receive such immense quantities of fine clay for their works from the neighbourhood of Poole, are satisfied that, in the transport of this article alone, it will be a great boon, stating, in the above-named declaration, "that it will be the means of transporting the clay used in the Potteries direct from the pits to the manufacturers, quicker, cleaner, dryer, than by the present sea and canal carriage, and at



the same, or even less, cost." It is evident, from an inspection of the above map, that, in avoiding the uncertain and dangerous voyage round the Land's End, and substituting a certain route of about four hours' duration, most unexampled advantages are offered to all the ports of the Bristol Channel, Wales, and every place connected with them.

Defective Railway Construction.—Our valued correspondent, Mr. C. H. Greenhow, in a letter inserted in the *Times*, on Thursday last, says—"In your paper of this day (Wednesday), I see that the Correctional Police of Lille, delivered its judgment on the 14th inst., in the case of the accident which occurred at Fampoux, on the Northern Railway, in July last. What I wish to call your attention to is the following paragraph, which occurs in the judgment refered to:—"That the immediate cause of the catastrophe at Fampoux was the running off the rails; whereas the cause of the running off the rails itself, notwithstanding the strenuous efforts of justice, but in consequence of the inadequate information furnished by science, has remained buried in the domain of conjectures, perfectly inconsistent with each other." Now, I have no hesitation in asserting, that the catastrophe was caused by the imperfect connection between the running surface of the wheel tire, and rail, in the mode of railway construction now pursued; the application of the one to the other being of such a nature that they only adapt themselves in one position, and, therefore, offer an effectual resistance in that one direction only. The consequence is, that on the relative level of the rails becoming deranged from any cause, the wheel on the lower rail runs on the extreme edge of the tire, not resting flat upon the rail; by this means the flange is raised partially above the edge of the rail, and so, not only diminishes the resistance offered by it to lateral displacement in a ratio proportioned to this elevation, but at the same time renders the action between the flange and the edge of the rail most dangerous—because, by describing a circle of greater diameter than the edge of the tire on which the wheel is resting, the flange is, therefore, revolving at the greatest speed; thus, there is a continual grind going on between it and the edge of the rail, whilst, should an unevenness in the surface occur, to afford it a fulcrum for it to act upon, it must, of necessity, rise on to the rail, and so allow the carriage to run off the line. A precisely similar action takes place in passing round a curve—because, in diverting the momentum in the required direction, the flange comes first in contact with the edge of the rail, which causes a rebound, slightly elevating that side of the carriage by the resilience, and thus destroying the adjustment between the wheel and rail on the opposite side, in the manner I have described; when the velocity is great, the resilience causes this rebound to be repeated from rail to rail, until sufficient force is accumulated to throw the wheel over the rail. I have little doubt that an improper action of the wheel on the rail, similar to what I have described, was the immediate cause of the accident which occurred at Fampoux; and I may add, that until a more scientific principle is introduced into the construction of railways, and the carriages intended to run on them, so long will the newspapers have the task of recording similar disgraceful disasters."

Sambre and Meuse Railway.—This undertaking has just completed its fifth call, which has, it is stated on authority, been remarkably well paid. The works are proceeding with great activity, 3000 men being employed on them; of these about two-thirds are working on the first section, extending from the commencement of the line at Charleroi to Walcourt, and including the two branches which traverse the great iron mine district. The two tunnels, and the other important works on this part, are far advanced; and the fine summer has enabled the contractors to lay the foundation of the principal bridges; and the whole distance, about 27 miles, will, it is expected, be ready for opening in September next. On the second section the remainder of the men are employed at the summit level, and at the tunnel at Dourbes, the two works which will regulate the completion of the whole; the remainder of the works are comparatively light, and the period of opening will depend on the number of hands set on. The opening of the first part will put the proprietors in possession of a very large traffic, quite independent of the second part, by the conveyance of iron ore to the works around Charleroi, and the two mineral branches crossing the high road from Philippeville to Couvin, at Laneffe and Fraire, will be extensively used by the iron-works lying immediately around and south of those termini, and will effect a saving of one-half in carriage. The iron trade of the district is in a state of prosperous and healthy activity, with every prospect of a long continuance, and the confident opinion entertained of the speedy reduction of the duties on Belgian iron iron going into France being greatly reduced, tends very much to improve the value of this description of property.

Halifax and Quebec Railway.—The following are portions of a communication, just received from New Brunswick:—"Having traversed a great portion of the projected line with Lieut. Henderson, one of the commissioners, and from inspection and information obtained, I am enabled to state that there are no engineering difficulties on a line from Halifax to the Bend at Petigodiac, crossing the Miramichi, about 12 miles above Chatham, running 23 miles above Bathurst, and the same distance from Dalhousie to Quebec. I met Mr. Simpson, the commissioner, from Canada, and obtained some valuable information from him. I cannot enter now into the policy, prospects, and advantages of the line; but I may mention, that, in traversing the province, I had many opportunities of judging of the soil, climate, &c. In the counties of Cumberland, Northumberland, Gloucester, and Restigouche, particularly in the two latter, the soil cannot be surpassed, and is not equalled by any that I have seen in that country, or on the continent; as a proof, wheat weighs 65½ lbs. to a bushel, and at the agricultural meeting at Bathurst the average was 66 lbs., and other produce in proportion. The climate is most salubrious and healthy. I saw numbers of emigrants, who in a few years have been enabled to purchase their properties, and are now living in a state of independence. From its position, soil, and climate, I consider that New Brunswick possesses many advantages for emigrants over Canada, South Australia, and New Zealand; and by documents, &c., I am prepared to prove it. I shall be happy to give you any information in my power respecting the direction (course) the line I conceive ought to be taken; and to state my reasons for advocating it in preference to the Boies Town, and American frontier project. I am convinced that the Government are not aware of the real value, importance, and resources of our North American provinces, or they would at once turn their attention to them, and to adopt measures for preserving and for assisting in colonizing them. These several provinces must be united, and governed by one Governor-General, with one Parliament, an uniform currency, and a free interchange of produce. To accomplish these objects, the formation of the railway from Halifax to Quebec, and afterwards to Montreal, is indispensibly necessary."

Price of Labour on Irish Railways.—There are now employed on the works of the Waterford and Limerick Railway, in and about Limerick, 120 carpenters, at wages varying from 3s. 4d. to 4s. per day; 52 smiths, earning from 3s. 10d. to 4s. per day; 250 masons, at 4s. 4d.; and 50 labourers, at 1s. 6d.

PROSPECTUS OF THE

BRISTOL AND POOLE HARBOUR RAILWAY COMPANY.

Capital £1,600,000, in 50,000 shares, of £30 each.—Deposit £2 2s. per share.

REGISTERED PROVISIONALLY.

PATRONS AND SUPPORTERS.

Sir E. DOUGHTY, Bart., Upton House, Dorset.
JOHN SAMUEL WANLEY SAWBRIDGE ERLE DRAX, Esq., M.P., Charborough Park, Dorset.
J. WELD, Esq., Lulworth Castle, Dorset.
Colonel JOHN MICHEL, Dutish House, Dorset.
WILLIAM CARTWRIGHT, Esq., Proprietor of Collieries in Monmouthshire and Glamorganshire.
E. B. ASHFORD, Esq., Babcary, Somerset.

ACTING COMMITTEE.

HENRY STRETTON, Esq., Ramsgate, Chairman.

Major J. B. Home, Army and Navy Club. | Gilbert M'Queen, Esq., Great Coram-street, Russel-square.
John Gray Wilson, Esq., Westbourne Grove. | Thomas Peers, 1, Lamb's Conduit-place.
Col. W. Mainwaring Sloane, Seymour-st. | George Chisman, Esq., Dalston, Middlesex.
Sir James Caleb Anderson, Bart.

PROVISIONAL COMMITTEE.

(With power to add to their number.)

Fred. William Hamilton, Esq., 59, Gloucester-place.
Rees Price, Esq., M.D., Tyne Hall, Great Ilford, Essex.
Capt. T. C. Newton, Bruton-street, and Lugwarden, Herefordshire.
Thos. Ottery Rayner, Esq., M.D., F.S.A., 1, Matthew's-place, Cambridge-heath.
Rev. C. Davies, Sandgate.
Major J. Mill, Guernsey.
Benjamin Read, Esq., 27, Gloucester-terrace, Kensington.
Edward Sankey, Esq., Canterbury.
J. Johnson, Esq., Davies-street, Berkeley-square.
G. Pusey, Esq., The Dells, Stoke Newington.
N. Crouch, Esq., South-place, Euston-square, and 64, Pall-mall.
R. B. Crofts, Esq., Hamilton-square, Birkenhead, Cheshire.
John Britten, Esq., Basinghall-street.
Lieut. Charles T. Hill, R.N., Queen's-square, Bristol.
Henry Lysier, Esq., Spring-terrace, Wandsworth.
Capt. Hippisley, Somerset-street, Cavendish-street.
Wm. C. O'Connell, Esq., Upper Seymour-street, Portman-square.

LONDON BANKERS.

London and County Bank; the London Joint-Stock Banking Company.

COUNTRY BANKERS.

Messrs. Stuckey and Co.; National Provincial Bank of England; Messrs. Ledgard and Co., Poole; Messrs. Bastard and Co., Blandford.

ENGINEER—George Rennie, Esq.

SECRETARIES (pro tem.)—Messrs. Castleman and Kingdon.

SOLICITORS.

Gilbert Stephens, Esq., 13, Northumberland-street, Strand.
Messrs. Castleman and Kingdon, Wimborne.

Since issuing the former prospectus, the committee being determined to proceed on the surest grounds, and anxious for the ultimate success of the undertaking, have made further and more minute inquiries into the remunerative traffic to be expected on this line; and they are warranted in stating, that the result of such inquiries has greatly exceeded the expectations upon which they grounded their former prospectus.

This line of railway, commencing at Bristol, will open a direct communication with Poole, passing through or near the important towns and villages of Whitchurch, Pensford, Clutton, Shepton Mallet, Bruton, Castle Cary, Wincanton, Stalbridge, Sturminster Newton, Shillingston, Stourpain, Blandford, Spittlsbury, Sturminster Marshall, Wimborne Minster, to Poole Harbour; and thus, by means of the line of packets intended to be established by this company, from that port to the Channel Islands and Cherbourg, and the railways now in progress from the latter place to the French capital, and from thence to Lyons, will complete the line of communication by the most direct way from Edinburgh to the south of France; thus enabling that country to supply herself with many articles of commerce at little more than half the cost she at present pays, and leaving a good remunerative profit to the company and producer at home.

Among the various sources of traffic to be expected on this line, the following are the most prominent:—The supply of the Government, with coal from the Welsh and Somersetshire pits, by means of the proposed line, for its different naval and steam depôts throughout the world. The Somerset pits, which are 36 in number, yield at present, about 2000 per diem, but are capable of yielding a much larger quantity; and, supposing that 2000 tons were carried by the railway, at 1d. per ton a mile, a distance of 40 miles for 300 days in the year, which is even less than the company have every reason to expect, it would yield a net return of £100,000, or 10 per cent. upon the estimated capital; deduct then 40 per cent. for working the line, wear and tear, and there remains the sum of £60,000, or 6 per cent. per annum on the capital. There can be no doubt of the demand of this important article of general consumption, from the great diminution of price to the consumer by the costs of carriage being reduced to 1d. per ton per mile from the present cost, which is from 6d. to 10d. The supply of the Channel Islands (population more than 100,000), and of France, with the best species of coal for the production of gas, as well as for the use of their manufactures and for domestic purposes. This article, by means of the various coal-pits situated on the line, will yield to the company a very fine remunerative profit, and be of the greatest benefit to the coal proprietor, as the coal necessary for the purposes of gas can be obtained in very large quantities, and delivered at Cherbourg at one-third less than they are now giving for the same coal, and which cannot, therefore, fail to be of equal benefit to the merchant abroad, the producer at home, and the proposed company. Besides these two great sources of coal traffic, there is the supply of the southern coast, and the different districts on the line, with coal for domestic use, at a saving of from 6s. to 7s. a ton. This is a circumstance that cannot fail to secure to the company the entire traffic, and be of the greatest benefit to themselves and the public in general. In addition to this, the line will afford to the great manufacturing city of Bristol a more ready market for all those articles of commerce of which France and the Channel Islands stand so much in need, and which are manufactured in great quantities at that city; and as soon as the line is completed, tenders will at once be submitted to Government for the more speedy transmission of the mails to the Channel Islands, by which a saving of more than 12 hours will be effected, and to the north and north-west of Great Britain a saving of 24 hours.

There is also very considerable traffic to be derived from the various stone quarries, iron mines, and clay pits, on the line (the clay pits yielding alone more than 50,000 tons annually); sand from the Isle of Wight, for the manufacture of glass, of which more than 10,000 tons annually are used in Birmingham alone; the present mercantile traffic which now goes round the Land's-end to the western ports; the great agricultural, manufacture, and passenger traffic from the rich and populous districts through which the line passes; and the traffic which must be thrown upon the line from the Welsh iron and coal-masters, as being the nearest and most direct outlet to the continent for the produce of that country. Independent of remuneration, this line ought to be looked upon as a great national undertaking and benefit—as it will do away with the necessity for vessels now employed in the Dutch, Danish, Swedish, and Russian trades, bound to the western parts of England, going round the Land's-end, by at once opening to them the harbour at Poole, which has been pronounced by eminent engineers to be one of the best natural harbours in the world, and capable, at a small expense, of being made accessible to vessels of the largest class with perfect safety, and enabling them to send their cargoes to their different destinations in less time, and at less expense, than at present; by this means, not only will the shipowner and the merchant be greatly benefitted, but the company will derive an immense annual revenue from the cargoes of northern produce thus landed at Poole, to be again distributed, by means of their railway, to the different manufacturing towns throughout this country; and the passenger traffic that would naturally follow so large a portion of mercantile traffic cannot fail to yield to the company a very handsome return upon their outlay.

The average number of vessels detained in this trade in going round the Land's-end amounts, from the most authentic sources, to about 4000, each vessel averaging a detention of five days. The average tonnage of these vessels amounts to 130 tons, which would give six men to each vessel, working after the rate of £60 per month, which would give, for the number of days detained, £10 to each vessel: this, multiplied by the number of vessels—viz. 4000—would give the sum of £40,000, which will be entirely saved by means of this line. This is independent of the loss of life, destruction of property, expense of insurance, and loss of time, which would all be saved by the projected rail—the statistics of which, did space allow, would make every one look upon the present undertaking, not only as one of great local importance, but one of great national benefit.

The advantages have long been known and appreciated, and the present company have determined to bring them into play in the most full and efficient manner. The expense of storage at Poole, as well as the port dues, are less than at any port in the kingdom; so that the merchant would be enabled to keep his goods there at a less expense than at his own port. He would be enabled to perform five voyages for every three from the northern parts; and, by means of the speedy communication by the electric telegraph, and the rapid travelling of the present day, many advantages and conveniences will be afforded.

A careful preliminary survey having been made by the company's surveyor, the line has been pronounced to present less than the average engineering difficulties, about 30 miles being through a rich, populous, and level valley. The harbour of Pool has also been surveyed, and the bar at the mouth of the harbour has been pronounced to be capable of removal, and is now actually being removed; thus opening to vessels of the largest tonnage one of the safest and most commodious harbours in the world.

These are a few of the advantages offered to the public by the projected line; and the committee, impressed with the sense of the excellence and legitimacy of the undertaking, and basing their views upon ascertained facts and undoubted evidence, feel themselves warranted in offering to all applicants for shares the following conditions—viz.: That no party taking shares in the said company shall be liable (in case of failure of the company) to a larger amount than 5s. per share, unless a greater sum shall be sanctioned at a general meeting of the shareholders called for that purpose; so that, in case the company fail at any period of time prior to such meeting being called, the committee pledge themselves to return £4 17s. per share instead of £2 2s., and a proportionately larger amount if the accounts of the company, upon inspection, show a less expenditure.

At the first general meeting of the shareholders the committee will produce an account signed by the bankers, of the several sums received by them on account of the company—thereby warranting to the shareholders, that the amount subscribed is still in the hands of the bankers, minus the 5s. per share.

The future plans of the company will be laid before the shareholders at their first general meeting, and everything submitted to their investigation and approval.

To the Provisional Committee of the Bristol and Poole Harbour Railway Company.

I request you will allot me shares of £20 each, in the above undertaking, agreeably to the prospectus; and I agree to accept such shares as may be allotted me on the terms above mentioned, and also to pay the deposit thereon, and to sign the Parliamentary contract and subscribers' agreement, when required.—Dated the day of 1846.

Name.....
Residence.....
Trade or profession.....
Reference.....
Address of referee.....

*** Applications for shares may be made, in the above form, at the offices of the company, 55, King William-street, City; Gilbert Stephens, Esq., 13, Northumberland-street, Strand; Messrs. Castleman and Kingdon, solicitors, Wimborne; T. Hyatt, Esq., solicitor, Shepton Mallet; S. Smith, Esq., Blandford; M. K. Welch, Esq., solicitor, Poole; R. Bate, Esq., Bridgewater; Messrs. Drew and Charlton, shirebrokers, Manchester; Messrs. J. Smith and Co., stockbrokers, Edinburgh; Messrs. Stanley and Washborough, solicitors, Bristol; Messrs. Bradley and Barnard, stockbrokers, Bristol; Messrs. Hill and Williams, solicitors, Farrington Gurney; J. McGeorge, Esq., 110, St. Vincent-street, Glasgow; Messrs. Lane and Perry, stockbrokers, Birmingham; Messrs. Thompson and Co., stockbrokers, Derby; and Messrs. Jones and Co., Dame-street, Dublin.

"A FRIEND IN NEED IS A FRIEND INDEED."

TOOTH-ACHE, TIC-DOLOREUX, & EAR-ACHE, instantly CURED, by using the celebrated GREGORIAN PASTE, which has never been known to fail in one single instance. It is perfectly harmless, and applied with the greatest ease. The Grogorian Paste is so well known and esteemed, that it is needless to speak of its virtues.—Sold wholesale by F. Kain, 5, York-terrace, Commercial-road East, and by most respectable chemists.

MUNTZ'S PATENT METAL SHIP SHEATHING, &c.

TO SHIPOWNERS, MERCHANTS, &c.

Frenchs Walls, near Birmingham, Oct. 17, 1846.

GENTLEMEN,—The great difficulty of convincing the Lords of the Privy Council of the sacrifices I had made during the last 14 years to bring my invention into general use, in opposition to the vexatious and unscrupulous conduct of my opponents, has prevented my obtaining that extension of my patent for which I applied, because I felt that the value of the invention to the commercial interest justified the application, and which I am now more than ever convinced was equitably my due.

Since the extension was refused, many endeavours have been made to induce me to join in an arrangement to sell, in future, at the same prices, relative to copper, which I obtained under the patent; but, being convinced that, if I were not allowed to retain my privilege, the public had a far greater claim to the profits of my invention than those who had done all in their power to stifle it in its birth, I have declined all such proposals, and the price having already been reduced one halfpenny per lb., compared with copper, I am determined, after my English patent expires, on the 22d inst., at all times to sell my manufacture at the lowest price which can possibly be afforded, if due attention be paid to quality, on which its durability and cleanliness entirely depend.

Observing that the late warehouse clerk of my agents, Messrs. Charles Moss and Co., who is now in the employ of my most determined opponents, has issued a circular, in which he falsely represents himself as having resigned the management of my business in London, I think it needful to state, that he never had the management of my business—never saw a sheet of metal rolled in his life, and is entirely ignorant of the manufacture of the metal.

It is, perhaps, needless to say, that every kind of metal sheathing and bolts will now be made and sold as my invention; I, therefore, beg to state, that, for the protection of consumers and myself, my name will be stamped in full upon each sheet, and every bolt, and that no person will be allowed so to use my name in England, after the 22d of Oct., —also, that the agents named below are alone able to sell metal of my manufacture.

Assuring you that neither trouble nor expense shall be spared to provide articles of the best quality, I remain, yours respectfully, G. F. MUNTZ.

AGENTS.

London—Messrs. Charles Moss and Co.
" Messrs. Young, Dowson, and Co.
Liverpool—Messrs. Charles Moss and Co.
Whitehaven—Messrs. J. J. Pelle and Co.
Greenock—Messrs. A. G. Kidston and Co.
Glasgow—Messrs. A. G. Kidston and Co.
Dundee—Messrs. Kerr and Guild.
Leith—Messrs. J. Mitchell and Co.
Newcastle—Messrs. T. and W. Smith.
North Shields—Messrs. Pow and Fancus.
Sunderland—Messrs. Haddock and Clay.
Hull—Mr. John Foster.
Yarmouth—Messrs. John Shelly and Co.
Scilly—Messrs. F. Banfield and Sons.
Bristol—Mr. Edward Drew.
Jersey—Mr. P. Peller.
Waterford—Messrs. W. White and Co.
Belfast—Mr. A. McLaine.
Hamburgh—Mr. J. C. Ramsden.
Bremen—Mr. Francis Tecklenborg.
Rotterdam—Mr. Gerrit Visser.

HEMP AND FLAX MANUFACTURING COMPANY—

(Mr. DONLAN'S PROCESS).—*PROVISIONALLY REGISTERED.*

To be Incorporated by Royal Charter, limiting the liability of shareholders to the amount of their subscriptions.

Capital £225,000, in 18,000 shares, of £12 10s. each.—Deposit £1 per share.

TRUSTEES FOR THE INVENTOR.

The Right Hon. VISCOUNT INGESTRE, M.P.—Sir GEORGE SINCLAIR, Bart.

PROVISIONAL COMMITTEE.

Lord CHARLES BEAUCLERK, Lowndes-street, Lowndes-square
The Hon. AUGUSTUS BERKELEY, Spring-gardens
M. J. J. DONLAN, Esq., Abbot's Bromley House, Staffordshire
JOHN EDWARDS, Esq., Rapley, near Bagshot
J. G. B. HUDSON, Esq., St. George's-terrace, Hyde-park
H. RICHARDSON, Esq., Regent's-park.

(With power to add to their number.)

SUPERINTENDENT OF THE FACTORY—Mr. Donlan.

SECRETARY—Henry Prater, Esq., M.A., Middle Temple.

BANKERS—Messrs. Rogers, Olding, and Co., Clement's-lane.

SOLICITOR—John Thomas Sanders, Esq., 31, Ely-place, Holborn.

This company, for manufacturing upon the principles of Mr. Donlan, Italian, Russian, Dutch, and colonial, as well as Irish and other home grown hemp and flax, and all fibrous substances, was formed some years since at Rugeley, in Staffordshire, and it is now proposed to establish it on a larger basis.

The factory is in profitable operation, and the balance-sheet for the year 1845 may be inspected by persons taking shares, at the office of the company, and where also samples of the different fabrics are on view, and some of the finest prepared fibres are worthy of the serious attention of silk manufacturers.

Private orders for sail-cloths, rick-cloths, paulings, railway sheets, twills for military trowsers, and other fabrics, of superior quality, manufactured from hemp and flax, are executed with despatch.

The necessary deed will be forthwith prepared for the signature of the shareholders.

For particulars, prospectuses, and forms for applications for shares, apply at the offices of the company, 10, Coleman-street, London; to J. T. Sanders, Esq., 31, Ely-place, Holborn, the solicitor to the company; or to the undersigned, the agent for the trustees of the invention, and for the promoters of the company.

JOHN SIMPSON,
25, Moorgate-street, and 1, Coleman-street-buildings.

ALBION PLATE GLASS COMPANY.—The ENTIRE

REMISSION of the DUTY on PLATE GLASS has created a demand for that article far beyond the present power of supply. The vicinity of London affords great and peculiar advantages in this manufacture; and several valuable improvements (some of which will be patented) are yet to be developed. To carry out these, in a judicious and comprehensive manner, by practical men, who have effected many of the greatest improvements during the last 20 years, this COMPANY HAS BEEN FORMED, under most respectable and scientific auspices; and it will, by manufacturing a superior article, at *reduced cost*, undoubtedly, secure to itself a large and profitable portion of this important and vastly increasing branch of trade.

A considerable amount of the capital is already subscribed, and the remaining part of the investment will be apportioned to *bond fide* and responsible parties only—giving a preference to the respectable members of the trade and large buyers.

Apply to the secretary pro tem., at the offices of the company, No. 4, Railway-place, Fenchurch-street, where any further information may be obtained.

HENRY HOWARD, Secretary pro tem.

METROPOLITAN IRON AND STEEL COMPANY,

(Provisionally Registered, pursuant to Act of Parliament, 7 and 8 Vic., c. 110.)

Capital £200,000, in 10,000 shares of £20 each.—Deposit £2 per share.

A company has been formed for the MANUFACTURE OF IRON AND STEEL (from cast, scrap, and all descriptions of old refuse iron), which shall be of a superior quality to any hitherto produced in the mining districts.—The objects of the company are fully explained in the prospectus.

In allotting the shares a preference will be given to parties in the iron trade.

Applications for shares and prospectuses to be made to Mr. Charles Chilton, No. 39, Moorgate-street; or at the Steam Mills, 135, Old-street.

Copy of a Letter from "COLONEL HAWKER" (the well-known author on "GUNS AND SHOOTING").

Longparish House, near Whitchurch, Hants, Oct. 21, 1846.

SIR,—I cannot resist informing you of the extraordinary effect that I have experienced by taking only a few of your LOZENGES. I had a cough, for several weeks, that defied all that had been prescribed for me; and yet I got completely rid of it by taking about half a small box of your Lozenges, which I find are the only ones that relieve the cough without deranging the stomach or digestive organs.—I am, Sir, your humble servant,

To Mr. Keating, &c., 79, St. Paul's Churchyard. P. HAWKER.

KEATING'S COUGH LOZENGES are PATRONISED also

by his Majesty the King of Prussia, his Majesty the King of Hanover, and most of the Nobility and Clergy of the United Kingdom, and are especially recommended by the Faculty.

RECENT TESTIMONIAL.

DEAR SIR,—Having been, for a considerable time during the winter, afflicted with a violent cough, particularly at lying down in bed, which continued for several hours incessantly, and after trying many medicines without the slightest effect, I was induced to try your Lozenges; and, by taking about half a box of them, in less than 24 hours, the cough entirely left me, and I have been perfectly free from it ever since.

9, Claremont-terrace, Pentonville, I am, dear Sir, yours, very respectfully,
Feb. 17, 1845. JAMES ELLIS,

Mr. KEATING. (Late proprietor of the Chapter Coffee-house, St Paul's.)

Prepared and sold in boxes, 1s. 1½d., and tins, 2s. 9d., 4s. 6d., and 10s. 6d. each, by T. Keating, chemist, &c., No. 79, St. Paul's Churchyard, London; and retail by all druggists and patent medicine venders in the kingdom.

N.B.—To prevent spurious imitations please to observe that the words "KEATING'S COUGH LOZENGES" are engraven on the Government stamp of each box.

NOTICE.—These Lozenges contain no opium, or any preparation of that drug.

UNIVERSAL GAS BURNER—THIRTY TO FIFTY PER

CENT. SAVED!—The PATENTEES beg to call public attention to the following facts. The advantages resulting from the invention are various and striking. Independently of a saving of 30 to 50 per cent., the combustion is perfect, and the brilliancy produced superior to any light hitherto discovered. It emits neither smell nor smoke, and burns steadily for any period; and such is its purity, that it neither affects nor soils the most delicate colour or the finest fabric. Objections have been made to the introduction of gas in dwelling-houses, to the expense of fittings, to its destruction of furniture, draperies, gold moulding, &c.; those are entirely obviated by the PATENT UNIVERSAL GAS BURNER. As the cost of laying on gas is much lower than is commonly supposed, it is adapted for private dwellings, as well as for club-houses, hotels, manufactories, and public buildings. One of the small burners is amply sufficient to light a good-sized room, at a sum immeasurably lower than spirit, oil, or candle, with the avoidance of waste or trouble.

The merits of the "Burner," its brilliancy and economy surpassing every other known light, are shown by the annexed authentic opinions of the qualities of the UNIVERSAL GAS BURNER.

EXTRACT from the "Proceedings of the Institution of Civil Engineers," Tuesday, May 26 1846—Sir JOHN RENNIE, president, in the chair.

"A gas burner, of a novel and ingenious construction, was exhibited. The principal novelty was the introduction of a stream of air to the centre of the flame by a hollow button in the middle of the burner. The air passing up through the hollow stem of the button, was heated, and passed out by two series of fine holes around the periphery, and impinging with force on the flame of the gas curved it outwards in the shape of a tulip, while the oxygen of the air, mingling with the carburetted hydrogen gas, produced a very perfect combustion. The *flame was quite white down to the top of the burner*—was very steady, as was amply demonstratedby the excellent light of the Institution, where these burners have been used. In comparing the consumption of these burners with that of the concentric ring burners, and trying the power of the two lights by the photometer, the new burner gave a better light, with a saving of rather more than one-third.

CERTIFICATE.

POLYTECHNIC CHEMICAL SCHOOL.—"In testing Clark, McNeil, and Co's Universal Gas Burner with one of the best shadowless burners, *it gave a more pure and brilliant light*, with a saving of 20 to 25 per cent."

GEORGE CRIPP, *Engineer*, ROBERT LOUDOTTON, *Secretary*.

CERTIFICATE.

"In a series of experiments made upon Clark, McNeil, and Co.'s Patent Universal Gas Burner, its superiority was satisfactorily established in economy and the quality of the light; tested against argand burners, Nos. 4 (12 holes), and 6 (15 holes), it afforded a saving of at least 25 per cent., and against three fish-tails burners, No. 4, 40 per cent. *The colour and brilliancy of the flame is superior to any other burner.*"

T. W. KEATES, *Consulting Chemist*, J. D. PALMER, *Mechanical Inspector*.

The UNIVERSAL GAS BURNER is used nightly at the Polytechnic Institution, and may be had and seen from 11 till 4, at the patentees, 60, St. Martin's-lane Charing Cross, and of all gas fitters in London.

BIRMINGHAM, WOLVERHAMPTON, AND DUDLEY

RAILWAY.—CONTRACT FOR WORKS.—Notice is hereby given, that the directors of this company will meet at their offices, 34, Bennett's Hill, Birmingham, on Monday, the 14th Dec., 1846, at Twelve o'clock in the day, for the purpose of RECEIVING TENDERS for the construction of the following works:—

GREAT BRIDGE CONTRACT—from Vyse-street, Birmingham, to Great Bridge, being a distance of about six miles.

Drawings and specifications of the line may be seen from the 16th Nov. to the 1st Dec. (inclusive), at No. 102, Constitution-hill, Birmingham; and from the 2d Dec. to the 12th Dec. (inclusive), at No. 17, Great George-street, Westminster.

The necessary forms of tender may be obtained at these places during the above-named periods.

Tenders are to be delivered at the offices of the company on or before the 14th Dec., not later than Twelve o'clock in the day, when and where persons tendering are requested to be in attendance.

The directors do not pledge themselves to accept the lowest tender.

WILLIAM MATHEWS, Chairman,
JOHN WILLIAM KIRSHAW, Secretary.

34, Bennett's-hill, Birmingham, Oct. 28, 1846.

NOTE.—*Nov.* 16, 1846.—Contractors wishing to tender for the above contract, are requested to meet at No. 17, Great George-street, Westminster, on the 23d inst., at Two o'clock P.M., for the purpose of appointing a surveyor to take out the quantities in the usual way; and also to receive lithograph copies of the plan, sections, and specifications.

DUFFRYN LLYNVI AND PORTHCAWL RAILWAY.—

Notice is hereby given, that the EIGHTH, and LAST, CALL in payment of the QUARTER SHARES of this company, will become DUE on the 1st day of December next; and the proprietors of the said quarter shares are requested to pay the same (with all arrears which may be due) to the treasurer, William Towgood, Esq., banker, Cardiff.

Porthcawl, Nov. 10, 1846. W. S. BRADLEY, Clerk to the Company.

EAST OF SCOTLAND MALLEABLE IRON COMPANY.

—Capital £100,000, divided into 10,000 shares, of £10 each: 5s. per share to be deposited when the shares are allocated.

The shareholders of this undertaking are requested to meet within Mrs. Hutton's Inn, Dunfermline, on Thursday, the 3d day of December next, at Twelve o'clock noon, for the purpose of receiving the report of the proceedings of the interim committee, and of electing seven directors for the general management of the company's affairs.

The contract of copartnery, revised by eminent counsel, will, on that occasion, be ready for the signature of the shareholders who may be present. Future arrangements will be made for obtaining the subscriptions of those who may not find it convenient to attend.

The interim committee take this opportunity of stating, that certain parties in London, who, at the former allocation of shares, obtained allotments upon false or erroneous representations, having failed to pay their deposits, these allotments have now been forfeited; and that, in consequence, upwards of 1000 shares are again at the disposal of the committee, who will continue to receive applications for the same till the 28th day of November current, when a re-allocation will take place.

Such applications to be made in the subjoined form, addressed to Mr. James Smith Ronaldson, writer, Dunfermline, the interim secretary.

Dunfermline, Nov. 12, 1846.

To Mr. JAMES SMITH RONALDSON, *Interim Secretary, East of Scotland Malleable Iron Company, Dunfermline.*

SIR,—Please insert my name as a subscriber for shares, of £10 each, in the EAST OF SCOTLAND MALLEABLE IRON COMPANY, or any less number of shares that the interim committee may allot to me; and I agree to pay the deposit of 5s. per share thereon when the same are allocated, and to sign the contract of copartnery, to be prepared at the sight of the interim committee, on being required so to do.

I am, Sir, your most obedient servant,
Full name and designation.....
Signature .....
Reference .....
Date.....

LA JAHOTTIERE IRON-WORKS (LOIRE INFERIEURE).

COMPAGNIE EN COMMANDITE.

Constituted by Acte de Société, passed before Mr. Ducloux, in Paris, July 4, 1845.

Established under the French Law of Partnership, without personal liability to the shareholders, and under the inspection of a committee of shareholders.

Capital 1,000,000 fr., or £40,000, in shares of 1000 fr., 500 fr., and 250 fr., or £40, £20, and £10 each.

Deposit 25 per cent. per share on allotment—the remainder by three instalments, at intervals of four months each.—Dividend to commence from the payment of last instalment, but 5 per cent. interest allowed on each instalment in the meanwhile.

COMMITTEE OF INSPECTION.

BENJAMIN IFILL, Esq.
CLEMENT TABOR, Esq. | W. H. CADOGAN, Esq.
CHARLES POCOCK, Esq. | WILLIAM NORRIS, Esq.

(With power to add to their number.)

RESPONSIBLE MANAGERS.

T. LAMIE MURRAY, Esq., 26, Cornhill. | EUGENE DE PREZ, Esq., Nantes.

BANKERS—The Commercial Bank, Lothbury.

SOLICITOR—William Tatham, Esq., 22, Throgmorton-street.

The success which has attended the iron-works established by the company at La Jahottiere—the high price of iron in France, and the moderate cost at which the company are making pig-iron, owing to the cheapness and yield of the materials, which, by a long lease, they have secured—has induced the company to resolve on an immediate extension of the capital, in order to increase their make, and to commence the manufacture of bar and railway iron, which, for many years to come, is likely to increase in demand, and command high prices.

The company intend, without loss of time, to erect two more furnaces and a rolling-mill, and increase the make to 8000 tons of pig-iron per annum. This extension is founded on the result of experience, and may be stated as follows:—

Cost of making one ton of foundry pig-iron at La Jahottiere	*Fr.* 100, or	£4 0 0
Selling price in France of one ton No. 1 foundry pig-iron	*Fr.* 195 to 220, or	£7 15s. to 8 17 0
Estimated cost of one ton of bar-iron made at La Jahottiere	*Fr.* 195, or	£7 15 0
Selling price of one ton bar-iron in France.....	*Fr.* 395 to 400, or	£15 15s. to 16 0 0

The present emission of shares is made at par. Shares in iron-works in France are realising high prices, as will be seen by the following extract from the *Mining Journal* of 10th October last:—

"The iron monopoly in this country has naturally had the effect of sending up the shares in the iron establishments to an enormous price. The present price of the Decazeville shares is 3500 fr., which is seven times more than that at which they were issued. Other establishments have been yet more profitable. That of Terre Noire, near St. Etienne, for example, pays dividends equal to 75 or 76 per cent. on its original capital. Its shares are scarcely ever to be found in the market: but when by chance any do appear, there is great competition to obtain them, and it is by no means unusual to see half shares sold at from 42,000 to 45,000 fr.

In England applications for prospectuses and shares to be made to William Tatham, Esq., 22, Throgmorton-street; to R. Tredinnick, Three King's-court, Lombard-street; to the managers, or committee, under cover, to the committee of inspection.

LA JAHOTTIERE IRON-WORKS (LOIRE INFERIEURE).—

Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of the shareholders of this company will be HELD at 22, Throgmorton-street, on Thursday, the 26th day of November inst., at One o'clock precisely, to take into consideration the propriety of increasing the capital of the company, under the 15th Article of the Statutes, as recommended by the committee of inspection.

(Signed) BENJAMIN IFILL, Chairman.

N.B.—Shareholders attending the meeting, must, three days before hand, deposit their shares, and receive a certificate, at No. 8, Rue Lafitte, Paris; the Commercial Bank of London; or with T. Lamie Murray, Esq., 26, Cornhill.

LA JAHOTTIERE IRON-WORKS (LOIRE INFERIEURE).—

Notice is hereby given, that NO FURTHER APPLICATIONS FOR SHARES in this company will be RECEIVED after FRIDAY, the 4th of Dec. next, immediately after which the allotment will take place.—For prospectuses and forms of application, apply to William Tatham, Esq., solicitor, 22, Throgmorton-street, London.

By order of the committee, WM. TATHAM, Solicitor.

PATENT GALVANISED IRON WIRE ROPE WORKS

MILLWALL, POPLAR.

ANDREW SMITH begs to inform the Mining, Railway, and Shipping interests, that he has obtained a PATENT for an IMPROVED METHOD of GALVANISING IRON, producing a much superior article at a considerable saving in cost—the improved process for galvanising wire rope, adding only 10 lbs. per ton instead of 20 lbs., under the ordinary processes. The rope is extensively used in damp situations, for mining and railway purposes, and for ships' standing rigging.

THE PROJECTED RAILWAYS.

PATENT METALLIC SAND OR ENGLISH POZZOLANO.

—The PROPRIETORS of the METALLIC SAND, after many years' experience of its merits, confidently RECOMMEND it to the attention of Engineers, Architects, Builders, and the public generally, as an invaluable article for HYDRAULIC and OTHER WORKS requiring great strength and durability.

In analysis, the metallic sand is very similar to the Italian Pozzolano—the value of which, in all subaqueous works, is so well known to engineers and architects; but from its granular form, and the sharpness of its angles, and the increased quantity of iron it contains, the metallic sand has been found more durable, and much cheaper than any other similar material at present in use.

From its chemical qualities it forms, in admixture with lime and common sand, a cement, mortar, or concrete, of flinty hardness, and almost entire incompressibility; and from its adhesive and impervious qualities, it completely and for ever excludes water. The more it is exposed to the atmosphere, and to wet and damp, the harder and more durable it becomes. In the formation of mortar and concrete, it has been extensively used in the great tunnels on the London and Birmingham Railway, in the foundations of the New Houses of Parliament, sea walls on the North Devon Railway, Clifton Reservoirs, and other works of importance.

As an external stucco, the metallic sand cement is unaffected by frost or wet; in appearance it resembles the best Portland stone; requires, therefore, neither colour nor paint, and is entirely free from vegetative cracks and blisters, to which Roman cement is liable.

Further information will be given, and specimens shown, on application to Mr. C. K. Dyer, 4, New Broad-street; and at the Metallic Cement Wharf, King's Road (opposite Pratt-street), Camden New Town, London.

ANALYSIS OF THE PATENT METALLIC SAND.

Silica	49	Lime	6
Oxide of iron	32	Magnesia	2
Alumina	5	Zinc	3
Arsenic and carbonate of copper			2

THE WEATHER.—"MARKWICK'S PATENT CHEST

PROTECTOR effectually retains the warmth of the part to which it is applied, and prevents all contact with external damp or cold."—*Advertiser.* "Is much more efficacious than any thing ever used for the purpose."—*Bell's Life.* Nos. 1 to 4 are for constant wear. Nos. 5 and 6 for placing over the shirt on leaving heated rooms, in travelling, &c. To be had of all respectable chemists, hosiers, &c., at from 1s. to 4s.; and wholesale at the Patent Epithem Depôt, 69, King William-street, City.

NEWBRIDGE AND TAFF VALE COLLIERY,

GLAMORGANSHIRE.—2000 shares, at £10 each.

This valuable colliery is situate in the parish of Llanwonno, in the county of Glamorgan, in the centre of the South Wales Mineral Basin, contiguous to New Bridge, 12 miles from Cardiff; and the Taff Vale Railway, from Cardiff to Merthyr Tydvil, runs through the property—granted, by a lease of 360 acres, for the term of 31 years. The property is surrounded with profitable collieries—one of which (Mr. Coffin's) adjoins this, and supplies the Great Western Railway. Three veins are found to be throughout this property—the Goffion Vein, 9 ft. thick—the Cummor Vein, 3½ ft. thick—and Coffin's Vein, 4 ft. thick. These veins—proved by the usual computation—will yield an aggregate quantity of *Ave millions tons.* This, by working 300 tons per day, from one pit only, at a profit of 2s. 6d. per ton, will yield a clear income of upwards of £7500 per annum; but, as this rate of produce will last considerably more than thrice the period of the lease, the colliery will be worked by more pits, and, consequently, yield a profit of at least £20,000 per annum, at a cost of, say, 6s. per ton, and sale 8s. 6d. per ton; but Mr. Coffin obtains considerably more per ton; and, therefore, it is but fair to suppose the present company will obtain the same; in which case, the profit will be upwards of £30,000 per annum. Even this large sum cannot be supposed to be too highly estimated, when it is recollected that the utmost cost is estimated at 6s. per ton, and the sale only at the moderate price of 8s. 6d. per ton—whereas all coal of the district is sold above the estimate, and that the Taff Vale Railway runs through the property—that the colliery is within 12 miles of the large shipping port of Cardiff—that the coal can be raised from the pit and directly placed on the railway waggons—and that the coal is known to be of superior quality for steam-engines, from the fact of its being used by the Great Western Railway. The colliery will be in full operation in about two years. For the first year the shareholders will receive a dividend of only 5 per cent. out of the first year's produce; but, as in the meantime, the Goffion and Cummor veins will be reached, and be in gradual increase of produce—the second year's dividends will be large; and, therefore, there is every fair reason to say, this undertaking, not only carries the certainty of large profits, but presents fairer and more legitimate prospects of remuneration to the shareholders, than was ever presented to the public.

COST OF PRODUCTION AND CARRIAGE TO SHIPPING PORT.

Getting or Winning .....per ton	1s 7d	Wear and Tear	0s 2d
Underground hauling	0 4	Railway Carriage to Port	1 1½
Dead Work	0 8	Shipping Expenses	0 6
Prop Wood	0 1	Divers extra expenses	0 3
Royalties	1 0	Agency and Incidental Charges	0 2½
Total			6s 0d

Sale, 8s. 6d.—Cost, 6s. 0d.—Profit, 2s. 6d. per ton.

Application for shares, to be made to Messrs. Roberts, Carter, and Co., mineral surveyors, 21, Portman-street, Portman-square, where the engineer's calculations may be seen in detail (also a plan of the property, and conditions obtained).

Prospectuses, &c., may be had at the office of the *Mining Journal*, 26, Fleet-st., London.

STEAM COAL—WITHOUT SMOKE, as per experiments

made at her Majesty's Dockyard, Woolwich

CAMERON'S COALBROOK STEAM COAL, AND SWANSEA AND LOUGHOR RAILWAY COMPANY.—(Completely Registered and Incorporated.)

OFFICES—2, MOORGATE-STREET, LONDON.

The directors are now prepared to supply steam ship companies, manufacturers, shippers, and others, with the company's steam coal, either at the company's wharf at Swansea, or in London. A statement, showing by comparative trial the superiority of this coal for steam purposes over every other, and a scale of prices, may be had on application at the company's offices here, or at their wharf at Swansea.—March 18, 1846.

IMPORTANT TO ENGINEERS, MANUFACTURERS,

RAILWAY AND STEAM-BOAT COMPANIES.

Messrs. W. & C. MATHER beg to call the attention of the ABOVE PARTIES to their

IMPROVED ELASTIC METALLIC PISTONS.

The PRINCIPAL FEATURE and ADVANTAGE of THIS IMPROVEMENT is—

1. Its great ELASTICITY and SELF-ADJUSTING PROPERTIES, which enable it to yield to any inaccuracy of the cylinder, whether oval or taper, and to move with the least possible friction.

2. Its extreme SIMPLICITY and LIGHTNESS, consisting of only two pieces of metal having the vertical and lateral pressure in due and proper proportion, independent of each other.

3. It takes the LEAST possible SPACE, and is well adapted for air and water-pumps, as it allows of a larger water way.

Messrs. W. & C. MATHER feel confident that it is the BEST ELASTIC METALLIC PACKING yet known, for the above reasons.

Models may be seen at the Salford Iron-Works, Manchester; at W. Barker's, engineer, Newton-Moor; and also at J. Mather's, engineer, Beaufort-street, Chelsea, London.

TO ENGINEERS AND BOILER-MAKERS.

LAP-WELDED IRON TUBES FOR STEAM-BOILERS.

THE BIRMINGHAM PATENT IRON TUBE COMPANY,

42, CAMBRIDGE-STREET, BIRMINGHAM, & SMETHWICK, STAFFORDSHIRE, MANUFACTURE TUBES under an exclusive license from Mr. Richard Prosser, the patentee. These tubes are now very extensively used in the boilers of marine and locomotive steam-engines in England and on the continent—are stronger, lighter, cheaper, and more durable than brass or copper tubes, and warranted not to open in the weld. They may be fixed in the boilers without ferules, and can be taken out and refixed without additional trouble or expense.—Address, 42, Cambridge-street, Crescent, Birmingham.

LONDON WAREHOUSE,
68, *UPPER THAMES-STREET.*

TO ENGINEERS, RAILWAY CONTRACTORS, MINING

AGENTS, IRONMASTERS, AND OTHERS REQUIRING FINE GREASE for MACHINERY and AXLES of every description.—JOSEPH PERCIVAL'S IMPROVED ANTI-FRICTION GREASE is—after trials on machinery and axles of every kind where constant friction is kept up—admitted to be the most useful, economical, and best preparation of the kind ever offered to the public.

References to scientific and practical men can be given, and testimonials shown of its great excellence.—Samples forwarded on application at the manufactory, Green-street, Wellington-street, Blackfriars-road, London.

IMPORTANT TO RAILWAY COMPANIES.

PATENT KAMPTULICON COMPANY, 18, CORNHILL.

This company having completed their new factory, are prepared to supply railway managers and contractors with an elastic material (perfectly non-absorbent) to place between the rails and sleepers, and between the frames and bodies of carriages, to prevent jarring, and, consequently, wear and tear. The elastic planking is strongly recommended to be used for the backs and sides of carriages, to prevent splinters when accidents occur.

By order of the board, P. G. GREVILLE, Secretary.

PATENT IMPROVEMENTS IN CHRONOMETERS,

WATCHES, AND CLOCKS.—E. J. DENT, 82, Strand, and 33, Cockspur-street, watch and clock maker, BY APPOINTMENT, to the Queen and his Royal Highness Prince Albert, begs to acquaint the public, that the manufacture of his chronometers, watches, and clocks, is secured by three separate patents, respectively granted in 1836, 1840, 1842. Silver lever watches, jewelled in four holes, 6 gs. each; in gold cases, from £8 to £10 extra. Gold horizontal watches, with gold dials, from 8 gs. to 12 gs. each.

DENT'S PATENT DIPLIEDOSCOPE, or meridian instrument, is now ready for delivery. Pamphlets containing a description and directions for its use 1s. each, but to customers gratis.

NATIONAL LOAN FUND LIFE ASSURANCE SOCIETY.

26, *CORNHILL, LONDON.*

Capital £500,000.—Empowered by Act of Parliament.

This institution embraces important and substantial advantages with respect to Life Assurances and Deferred Annuities. The assured has, on all occasions, the power to borrow, without expense or forfeiture of the policy, two-thirds of the premiums paid (see table); also the option of selecting benefits, and the conversion of his interests to most other conveniences or necessity.

Assurances for terms of years are granted on the lowest possible rates.

DIVISION OF PROFITS.

The remarkable success and increasing prosperity of the society has enabled the directors, at the last annual investigation, to declare a fourth bonus, varying from 35 to 85 per cent. on the premiums paid on each policy effected on the profit scale.

EXAMPLES.

Age.	Sum.	Prem.	Year.	Bonus added.	Bonus in Cash.	Permanent reduction of Premium.	Assured may Borrow.
60	£1000	£0 3 4	1837	£217 15 1	£109 0 11	£16 0 4	£445 0 0
			1838	192 3 0	87 1 4	13 10 2	395 11 1
			1839	165 11 10	74 1 9	11 3 1	346 3 3
			1840	116 7 4	54 0 10	7 18 10	296 13 4
			1841	111 6 8	49 10 0	7 10 4	247 4 5

The division of profits is annual, and the next will be made in December of the present year.

F. FERGUSON CAMROUX, Secretary.

GREAT BRITAIN MUTUAL LIFE ASSURANCE

SOCIETY, 14, WATERLOO-PLACE, LONDON.

DIRECTORS.

THE CHISHOLM, Chairman | WM. MORLEY, Esq., Deputy-Chairman

HALF CREDIT RATES OF PREMIUM.

The attention of ASSURERS is particularly directed to the Half Credit Rates of Premium by which means assurances may be effected, and loans for short periods secured with the least possible present outlay, and at a less premium than for short terms only, and with the option of paying up the arrears at 5 interest—thus becoming entitled to participate in the *whole of the profit of the institution.*

Extract from the Half Credit Rates of Premium.

Age 20.	Age 30.	Age 40.	Age 50.	Age 60.
£0 17 0	£1 1 1	£1 8 2	£2 1 0	£2 4 2

Thus £1000 may be assured at the age of 30 by the annual payment of £16 10s. 10d. for the first five years.

The whole of the profits divided ANNUALLY among the members, after payment of five annual premiums.

An ample guaranteed capital, in addition to the fund continually accumulating from premiums, *fully sufficient* to afford complete security to the policy-holders.

Members assured to the extent of £1000 entitled (after payment of five annual premiums) to attend and vote at all general meetings, which will have the superintendence and control of the funds and affairs of the society.

Full particulars are detailed in the prospectus, which, with every requisite information, may be obtained by application to A. R. IRVINE, Managing Director.

London:—Printed and Published, weekly, by HENRY ENGLISH, at the Office, No. 26, FLEET-STREET, in the city of London, where all Communications and Advertisements are requested forwarded—addressed to "the Editor"—post-paid. November 21, 1846.